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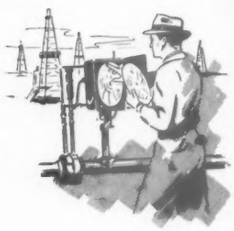

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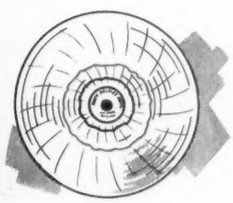

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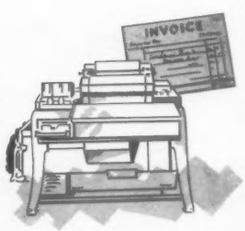


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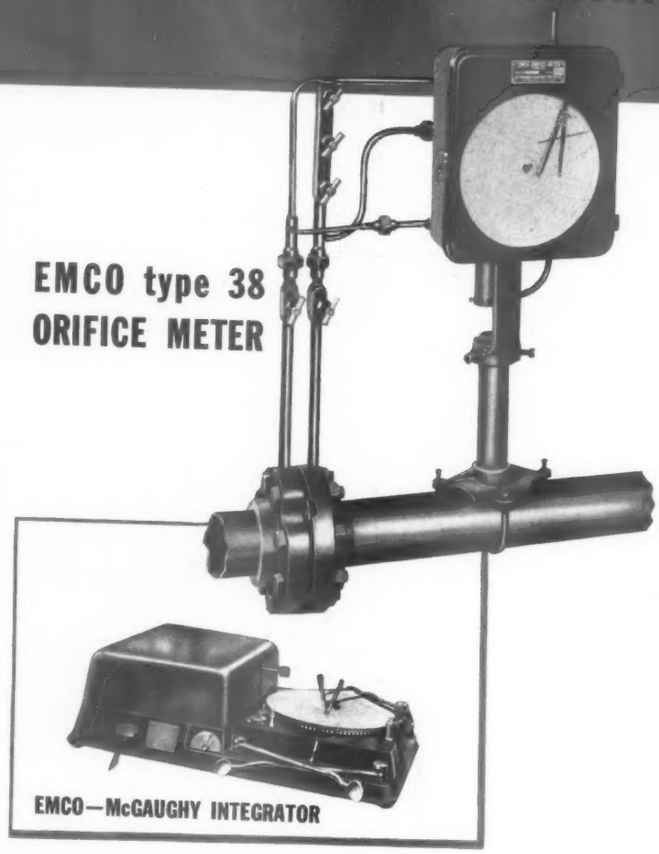

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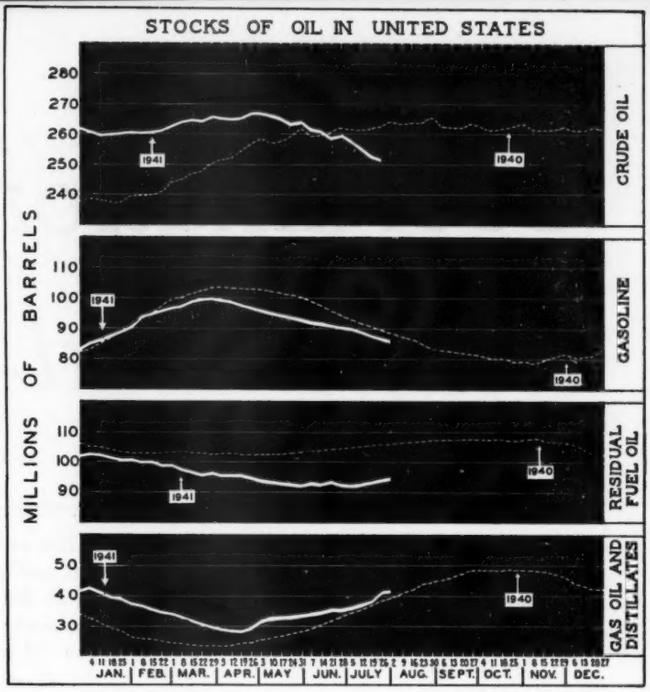
# Trends

## All Divisions Study Probable Effects of Gasoline Rationing




ALL branches of the petroleum industry are giving consideration to the probable effects of a substantial reduction in gasoline consumption now in prospect for the Atlantic seaboard states. It is assumed that the petroleum coordinator will shortly complete plans for the rationing of motor fuels involving all or parts of 16 coastal states and District of Columbia. Requests for voluntary curtailment by consumers have not materially changed the consumption in that area and it has been announced that plans for compulsory curtailment will be made effective.

It is pointed out that a 33 1/3 per cent reduction in gasoline demands in that area will mean a substantial increase in costs for all operators concerned. In no business are costs more directly dependent on volume than they are in the oil industry extending from the production of crude oil to the filling stations. In the case of stations it is said that a one-third reduction in volume would mean an added retail cost of at least 1 cent per gallon. Per-gallon costs for wholesale and transportation operations would also be higher.

A reduction of approximately 200,000 bbl. daily in gasoline demand which the one-third cut in Atlantic seaboard consumption would total, is equivalent to about 25 per cent of the present 775,000-bbl. daily output of gasoline at East Coast and Gulf Coast (Texas and Louisiana) refineries. Operators of these plants are concerned as to how this large reduction in their gasoline output will be brought about. If they maintain their present level of crude runs to stills then they will have to dump the 200,000 bbl. daily gasoline output on other domestic markets. Reductions in gasoline yields to provide for the 25 per cent curtailment in output are practically impossible in modern refinery operations. If refinery crude runs to stills are reduced 25 per cent, shortages in other products will develop. These possible developments indicate the dilemma of refinery operators who are faced with higher plant-operating costs regardless of how the rationing is handled. The reactions will carry back through the crude-oil production and transportation facilities for the areas now serving Atlantic and Gulf Coast refineries.

Currently, buyers of crude oil and refinery products are in agreement that markets are as strong as they have been in several years. There have been advances in prices for several refinery products and sentiment is growing for a general revision upward in crude-oil and gasoline price schedules. Studies recently completed indicate the justification for higher crude prices in stripper areas and in secondary-recovery operations which are of increasing importance in conservation plans.

**CRUDE PRODUCTION** *3,690,870 bbl. daily average—down 174,495 bbl. One year ago 3,494,217 bbl.*

**CRUDE STOCKS** *252,728,000 bbl. as of July 26—down 1,320,000 bbl. One year ago 262,579,000 bbl.*

**GASOLINE STOCKS** **86,779,000 bbl. as of August 2—down 166,000 bbl. One year ago 88,892,000 bbl.*

**RESIDUAL FUEL-OIL STOCKS** *94,800,000 bbl. as of August 2—up 945,000 bbl. One year ago 106,265,000 bbl.*

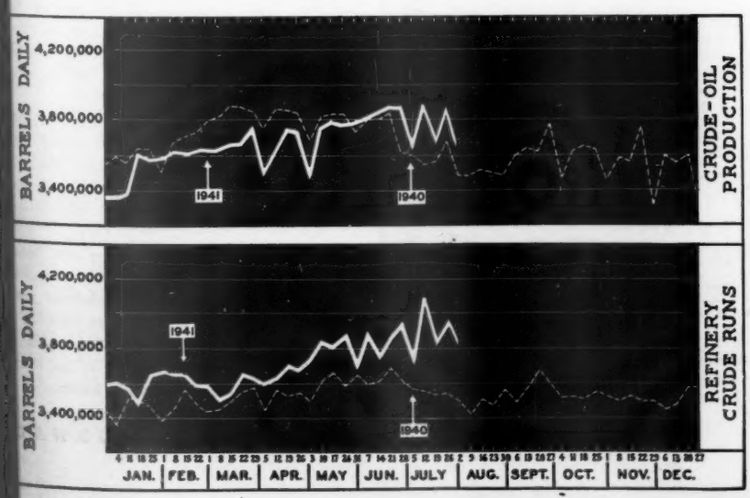
**GAS OIL AND DISTILLATES** *41,433,000 bbl. as of August 2—up 1,236,000 bbl. One year ago 39,594,000 bbl.*

**REFINERY RUNS** *3,845,000 bbl. daily week ended August 2—down 75,000 bbl. One year ago 3,510,000 bbl.*

*Includes 7,673,000 bbl. aviation motor fuel, up 131,000 bbl. One year ago 5,475,000 bbl.

### *DAILY AVERAGE PRODUCTION FOR WEEK*

| | Aug. 2, 1941 | Bur. Mines Aug. est. of demand | August state allowables | July 26, 1941 |
|---|---|---|---|---|
| Arkansas | 73,300 | 80,700 | 74,428 | 73,425 |
| California | 638,500 | 641,000 | 610,000 | 638,250 |
| Eastern fields | 112,300 | 121,000 | ..... | 112,100 |
| Illinois | 350,195 | 390,100 | ..... | 332,540 |
| Kansas | 235,500 | 240,800 | 242,800 | 241,950 |
| Louisiana | 318,905 | 324,500 | 324,500 | 312,355 |
| *North Louisiana* | *78,555* | ..... | ..... | *76,240* |
| *Louisiana Gulf Coast* | *240,350* | ..... | ..... | *236,115* |
| Michigan | 42,470 | 36,000 | ..... | 41,520 |
| Mississippi | 47,740 | 25,200 | ..... | 47,355 |
| Nebraska | 5,200 | 4,400 | ..... | 5,400 |
| New Mexico | 109,370 | 112,900 | 112,900 | 109,340 |
| Oklahoma | 417,250 | 492,400 | 415,000 | 415,450 |
| Rocky Mountain states | 107,640 | 109,400 | ..... | 107,070 |
| Texas | 1,232,500 | 1,361,600 | 1,412,121 | 1,428,610 |
| *East Texas* | *298,550* | ..... | ..... | *367,965* |
| *West Texas* | *221,650* | ..... | ..... | *266,120* |
| *North Central Texas* | *129,550* | ..... | ..... | *129,165* |
| *East Central Texas* | *79,400* | ..... | ..... | *84,305* |
| *Texas Panhandle* | *80,750* | ..... | ..... | *80,370* |
| *Texas Gulf Coast* | *341,150* | ..... | ..... | *405,395* |
| *Southwest Texas* | *81,450* | ..... | ..... | *95,290* |
| Total United States | 3,690,870 | 3,940,000 | ..... | 3,865,365 |
| Total production, Jan. 1-Aug. 2, 1941 | | 785,553,545 bbl. | | |
| Same period last year | | 803,162,715 bbl. | | |



# Coordination Meeting Will End Period of Uncertainty

By H. STANLEY NORMAN

**This summary of activities of the district and functional committees appointed by the petroleum coordinator is the composite findings of district editors of The Oil and Gas Journal.**

**Outstanding in the work so far is the lack of a specific program, a handicap to the coordination plan that likely will be overcome by the meeting of all chairmen called by Deputy Coordinator Ralph K. Davies in Washington, D. C., for August 11.**

**Cooperation of the industry in reducing East Coast consumption has attracted special commendation from Secretary Ickes.**

CALL of the 25 chairmen of district and functional committees to Washington, D. C., August 11 for discussion of procedure, program, duties and other matters related to the petroleum coordination plan is the first step to end a 30-day period of inactivity for 205 men appointed from the industry.

The committees had been marking time awaiting evolvement of a specific program to guide their actions beyond preliminary organization meetings which were circumscribed and limited by meager instructions from Washington.

A few of the functional groups have given cursory study to fundamental problems. Still, the petroleum industry in general and the committees in particular have been engaged in a defense-coordination program for 30 days without a clear conception of their duties.

Committees in District 3 have organized and elected permanent secretaries. Those in the other four districts have held their first meetings. Some have elected temporary secretaries, others have deferred organization and mainly they are all awaiting a pattern of procedure.

A paid staff soon will be set up in each of the five district offices, it was reported in Washington, D. C. this week. There has been no decision on how work will be divided between paid employes representing the coordinator and the voluntary industry committees but suggestions for working out a cooperative mode of operation are being accumulated in Mr. Ickes' office. Additional appointments to the industry committees to bring them up to the full membership of 12 each will be made in the near future.

Appointments to the key administrative posts in the petroleum coordinator's organization were announced a week ago and some observers believe designation of these men was awaited before specific programs were outlined for the functional committees.

Also awaited by the petroleum industry is a consolidation of the functions of numerous government agencies dealing with oil. When Secretary Ickes was appointed coordinator of petroleum for national defense, the industry placed high value on the prospects that a central clearing agency for oil problems would be created. Although he has had apparently harmonious conferences with the heads of a score of agencies, there are rumors that Mr. Ickes has had serious disagreements with the operating personnel of many of them, particularly the Maritime Commission, the OPM and the OPACS. Officials of OPM and OPACS admit that there is need for "clarification" of the functions of their offices and that of the petroleum coordinator.

## Conservation Sponsored By Eastern Committee

NEW YORK.—Functional committees in District 1, dealing with the East Coast area where problems arising from the defense program are particularly acute, have taken the leadership in direct action in behalf of the industry. The marketing committee, headed by H. W. Dodge of New York, vice president of the Texas Co., has launched an advertising campaign in 500 eastern newspapers. The program is supported by $250,000 contributed by eastern marketing companies and it directs an appeal to motorists for cessation of driving practices that waste fuel.

The request of Coordinator Ickes that service stations in 17 eastern states and the District of Columbia close from 7 p. m. to 7 a. m., effective August 3 was sponsored by the District 1 marketing

TO 5,000,000 FAMILIES WHO WILL HEAT WITH OIL NEXT WINTER . . .
EVERY STEP TO ASSURE HEAT WILL BE TAKEN BY YOUR GOVERNMENT
The Importance of Oil Burners in Our National Economy
4 WAYS TO SAVE MONEY WHATEVER TYPE OF FUEL YOU USE
THE OIL BURNER INDUSTRY HAS PledGED TO THE GOVERNMENT ITS FULL COOPERATION IN THE "SAVE FOR DEFENSE" PROGRAM
WILL YOU PLEDGE YOUR COOPERATION?
MY PLEDGE
SIGN AND MAIL
SAVE FOR DEFENSE
OIL BURNER INDUSTRY
SAVE and SERVE

The Honorable Harold L. Ickes Petroleum Coordinator for National Defense has appealed to every citizen to save gasoline . . .
Now it's up to you!
Every good citizen will cooperate
HERE ARE 10 DO'S AND DON'TS THAT WILL HELP YOU USE ONE-THIRD LESS GASOLINE
DO
DON'T
SAVE GASOLINE FOR NATIONAL DEFENSE
PUBLISHED UNDER THE AUSPICES OF THE PETROLEUM INDUSTRY, DISTRICT NO. 1 MARKETING COMMITTEE FOR NATIONAL DEFENSE.

***Facsimiles of two pieces of copy that industry is inserting in eastern newspapers appealing for conservative use of petroleum products. The oil industry has raised $250,000 in eastern states to support the campaign in copy at the right. On the left is the theme sponsored by the Oil Burner Institute***

committee. Coordinator Ickes has complimented the petroleum industry on its cooperation. He pointed to the advertising campaign in the eastern states as typical of the manner in which the industry has accepted the emergency conditions. At a press conference last week, the coordinator remarked that the oil industry's antiwaste advertising campaign was the first instance he could recall in which a producer of commodities spent money to discourage purchase of its goods.

In transportation too, District 1's committee appears to be more advanced in its work than similar groups of other districts because the problems there are of a more urgent nature than elsewhere. Most members of the District 1 transportation committee are active in plans for construction of the national defense crude line from East Texas through Illinois and to the East Coast.

The production committee for District 1, at its first meeting in Pittsburgh, Pa., July 26, recommended new drilling and rehabilitation of old wells to increase production in the eastern fields, but asked that adequate drilling supplies be made available.

### All Majors Cooperating

Every major interest in the marketing field is cooperating in the 12-hour service-station closing plan. Several scattered individually operated stations declined to observe the hours recommended by the coordinator and some declared they would not cooperate until forced. The 16 states and the District of Columbia embraced in the area of abbreviated operating hours contain approximately 98,000 stations.

Eastern marketing executives revealed that the present closing plan is primarily in the nature of a test period projected for the month of August. There is general agreement that the plan will prove ineffectual in attaining the reduction of 30 per cent in eastern gasoline consumption which is the goal of Coordinator Ickes. The night closing was effected by a formal recommendation from the coordinator. It followed a recommendation made to him July 24 by the District 1 marketing committee.

Large suppliers in the East are also using direct mail to inform their dealers and customers about conditions that led up to shorter station-operating hours.

"This action, as you know," said a letter distributed to its eastern division managers by Socony-Vacuum Oil Co., Inc., "results from a shortage of gasoline supplies on the Atlantic seaboard caused by the transfer, at government request, of a large number of tankers to the British service." In posters prepared for its 25,000 eastern dealers, Standard Oil Co. of New Jersey explained first that no oil is moving from this country to Japan without full approval of the U. S. Government and exclusively in vessels of foreign registry.

"The situation in this country is not due in any way to lack of crude oil or ability to refine all gasoline we need," the Standard poster continued.

Sixteen of Standard's fleet of 63 coastwise tankers, the company declared, have been called into government service. Thirteen new tankers are under construction to replace those diverted to British service. The poster message ended with an appeal to disregard "rumors calculated to make a nation mistrust wisdom or doubt integrity of its political and business leadership."

Atlantic Refining Co. launched newspaper advertising several weeks ago. Copy pointed out methods of conserving gasoline by efficient operation of automobiles.

In a letter to all company employes, W. S. S. Rodgers, president of the Texas Co., asked that they as part of the oil industry provide leadership in this campaign to save gasoline. He listed several methods of saving, including elimination of unnecessary driving, slower speeds and proper engine adjustment.

Separate from the marketing committees' campaign but touching a phase of oil operations that face a more acute shortage this winter is the oil-burner-industry program to conserve fuel oil in the eastern states. The organization has used eastern newspapers to tell how burner efficiency may be improved by installing storm sashes, insulation, adjustments to mechanical equipment and finally appeals to the consumer to purchase defense bonds with the money saved in heating bills this winter.

*Hines H. Baker, left, vice president of Humble Oil & Refining Co. has been elected permanent secretary of the District 3 refining committee. C. B. Barrett, right, manager of the southern sales division at Houston, Tex., for the Texas Co., is secretary of the marketing committee*

## Unnecessary Drilling Curb Studied in District 2

CHICAGO.—Further activity of the District 2 committee is awaiting instructions from the coordinator's office in Washington. The preliminary organization meeting held here under the direction of Frank Phillips, district chairman and chairman of Phillips Petroleum Co., Bartlesville, Okla., developed phases of operations in production, refining, transportation and marketing that have been followed up in sessions of the functional groups.

Consideration has been given to reduction of unnecessary drilling, multizone completions, unit operation and other plans through which the request for reducing steel consumption in the production branch of the industry may be implemented. A question has arisen whether to make proposals to the various producing state regulatory bodies which have administrative authority over such matters or to go through the coordinator's office in Washington, D. C.

Refining, marketing and transportation committees are prepared to make definite recommendations for elimination of cross hauls, exchange of products, reduced hours of station operation and other similar methods for furthering the general theme of conservation. Probably the most discussed problem by District 2 committees has been how to obtain a priority rating for the industry that will assure it of the tools necessary to meet all obligations related to the defense program.

## Organization Completed By District 3 Groups

HOUSTON, Tex.—Committees in District 3 under Charles F. Roeser, chairman, president of Roeser & Pendleton, Inc., Fort Worth, Tex., have completed organization and each group has selected a permanent secretary.

Here too, the committee activities have been confined to discussion of the general operating problems with particular emphasis on transportation. The committees have been working without benefit of a specific program. With the realization that committee work could be nothing more than preliminary and subject to complete discard there has been little concentrated effort.

Hines H. Baker, vice president of Humble Oil & Refining Co., has been made permanent secretary of the refining committee and C. B. Barrett, manager of the sales department in the southern territory for the Texas Co., is secretary of the marketing committee.

Arrangements have been made to open the District 3 office at Houston but no definite action has been attempted pending receipt of instructions from Coordinator Ickes.

Mr. Roeser has not yet received confirmation of Grady Vaughn, Dallas, Tex., independent oil man, as deputy coordinator for District 3, although his selection was announced several weeks ago in Washington.

## Selection of Denver Staff Awaits Action by Ickes

DENVER, Colo. — Preliminary organizational plans have been discussed by the general and functional committees of District 4. A regional office will be established in Denver for the direction of petroleum matters. It will be in charge of a regional director and a general counsel and probably will have a staff of 25 or 30 employes. The staff will be composed principally of technicians and clerks.

Arrangements have not been made for paid employes and consideration has been given to budget matters. All details were held in abeyance until the scope of committee activities are clarified.

One of the matters considered at preliminary meetings was the addition of members to functional committees to make them fully representative of all phases of the industry.

In regard to personnel of the working staff, it was decided to await the organization of the division office under a deputy coordinator.

At both meetings of the district committees held so far it was emphasized that District 4 problems are not comparable to the East Coast or the

*(Continued on Page 27)*

# Search for Wilcox Production Spreads in North Louisiana

By GEORGE WEBER

GROWING interest in the Wilcox formation in North Louisiana promises to accelerate widespread leasing and wildcatting activity during the next several months. For more than a year the production possibilities deep in the formation have attracted interest, but recent strikes are expected to bring entry of additional operators and spread of the play southward, merging the north and south Wilcox producing areas, and eastward, into Mississippi.

To date a total of seven separate oil-producing areas have been opened in La Salle Parish, and an eighth is believed capable of commercial production in northern Avoyelles Parish. In addition, two gas pools were discovered and a third was proven by a wildcat blowout, although the well has not been completed. Most of the new oil and gas areas are in initial stage of development and none has been completely defined.

### Deep Wilcox of Interest

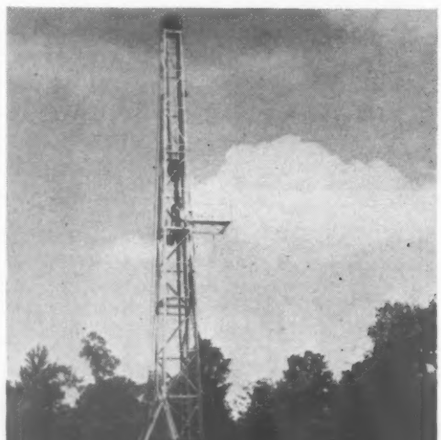
The area now active in North Louisiana was explored many years ago for production in the top of the Wilcox formation. That extensive exploration campaign resulted in discovery of oil in the Tullos, Urania, Georgetown and White Sulphur Springs fields of Grant and La Salle parishes. Until the discovery of the Olla field in March 1940, the deeper possibilities of the formation had received little notice.

New production ranges in depth from about 450 ft. below the top of the Wilcox at Olla, to 1,750 ft. in the formation at Little Creek. Therefore, current wildcatting is not considered conclusive unless tests are carried several hundred feet into the formation.

Table 1 lists all oil and gas discoveries in the Wilcox since the opening of the Olla field. Olla, the ranking field, produces from more than 125 wells, and Nebo the next in size and extent of development, has over 27 wells. The other oil fields, Little Creek, South Olla, Hemphill, Walters and the producing area north of Nebo are undergoing initial development. The three last named have only a few wells at this time, and their extent has not been determined. No drilling is being carried on at present in the gas fields, although operations are expected to be resumed in the Trout Creek area, where a wildcat, showing oil and gas, blew out several weeks ago making gas.

The original well in the South Olla pool produced gas, and the area was formerly called the Summerville field. Upon development of oil production, to the north and west toward the Olla field, the name was changed to South Olla. The 5-mile outpost producer north of Nebo opened a pool which has not been given an official name, since it is not known whether it represents a separate area, or an extension to Nebo.

Extent of the current exploratory program is indicated by Table 2, listing the completed wildcats in addition to field discoveries which have penetrated at least 500 ft. into the Wilcox formation. Other wildcats were drilled to that depth in close proximity to existing production, but are not listed, since their subsurface information is similar to that shown in field discoveries. The total of 44 wildcats, drilled in nine North Louisiana parishes, represents only the north development. Many additional tests have been drilled into the Wilcox formation in the southern area comprising Avoyelles, Rapides, Vernon and adjacent parishes. The location of new fields, and the partial extent of wildcat exploration is shown in the accompanying map.



*This light unit of the Sultana Drilling Co. drilled the discovery well of the Walters field, H. R. Scivally, trustee, 1 Louisiana Delta. Shallow pay depths in the North Louisiana Wilcox area are easily reached but completion of wells accounts for over half of the cost of the well due to difficulty in perforating thin sands, and shutting off gas and water zones*

### Producing Sands

The Wilcox formation in the area concerned shows a regional southeast dip. Productive sands are generally thin and lenticular in character and in many cases the interval between gas-oil and oil-water contacts is thin. A correlation of producing sands from one field to another is not at this time attempted, and geologists generally refer to the sands in a particular field as a group named for the field. In some cases, development has not reached a point where all producing sands are named.

At Olla, nine sands are productive. Named for the wells in which they first produced, they are, in their descending order, the Tremont, Kraft, upper Central, lower Central, Mathews, Mathews basal stray, Cruse, Goodpine and Sills sands, the latter being a gas sand. All horizons are included in what is termed the Olla group which occurs at about 2,035-2,790 ft., or 450-1,260 ft. below top of the Wilcox.

Little Creek has at least two distinct sands, not yet named, but designated as the upper, or Doughty, and lower horizons. Nebo has so far shown more producing sands than any other field. The field up to this time has been developed solely by H. L. Hunt on the Goodpine lease so that the 10 different sands, ranging from 3,425-3,900 ft. in depth, are named for the numbers of the wells in which they first produced. In their descending order, they are, the A-1, A-15, A-5, A-6, A-11, A-2, A-3, A-4, A-13 and A-14. The C-1, probably another sand, is producing in the pool north of Nebo, although it is impossible at this time to correlate it with the field sands.

The field sands pinch out updip and are not continuous, even within the limits of the fields as now developed. Erratic nature of the sand lenses makes wildcat exploration particularly hazardous, although drilling to the shallow depth is not costly. The entire area has been shot by geophysical parties several times, and the inten-

**TABLE 1—DATA ON RECENT DISCOVERIES IN THE WILCOX FORMATION IN NORTH LOUISIANA**

| Field— | Parish | Operator, fee and well number | Date completed | Location | Elev. (ft.) | Top Wilcox (ft.) | Producing section perforated (ft.) | Depth of prod. in Wilcox (ft.) | Total depth (ft.) | Penetration below top of Wilcox (ft.) | Dly. av. prod. (bbl.) | Gravity of oil (°A.P.I.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hemphill | La Salle | J. D. Critchett et al 1 Jones | Apr. 1941 | 41- 7-3e | 67 | 2,560 | 3,623-26 | 1,063 | 3,963 | 1,403 | 60 | 37.6 |
| Little Creek | La Salle | Placid 1 Doughty | Mar. 1941 | 32- 9-2e | 110 | 1,753 | 2,384-99 | 631 | 3,615 | 1,862 | 550 | 30.3 |
| Nebo | La Salle | H. L. Hunt A-1 Goodpine | Sept. 1940 | 10- 7-3e | 133 | 2,484 | 3,553-62 | 1,069 | 3,690 | 1,206 | 2,070 | 41.0 |
| Nebo (ext.) | La Salle | H. L. Hunt C-1 Goodpine | June 1941 | 33- 8-3e | 202 | 2,490 | 3,418-23 | 1,020 | 5,018 | 2,528 | 70 | 41.0 |
| Olla | La Salle | Placid 1 La. Central | Mar. 1940 | 13-10-2e | 177 | 1,632 | 2,270-76 | 638 | 2,983 | 1,351 | 12,190 | 30.5 |
| South Olla | La Salle | Peterson Pet. Corp. 1 Tremont | Sept. 1940 | 25- 9-2e | 150 | 1,869 | 3,162-64 | 1,293 | 4,020 | 2,151 | Gas | |
| South Olla* | La Salle | Placid 1 Tremont | Mar. 1941 | 23- 9-2e | 136 | 1,778 | 2,528-34 | 750 | 2,779 | 1,001 | 165 | 28.1 |
| Standard | La Salle | Placid 17 La. Central | June 1940 | 19-11-3e | 176 | 1,588 | 2,475-85 | 887 | 5,097 | 3,509 | Gas | |
| Trout Creek | La Salle | Big West Drlg. Co. 1 Whatley | ..... | 25- 8-2e | 186 | 2,411 | 3,165-68 | 754 | 3,927 | 1,516 | Gas blowout, not completed | |
| Walters (?) | La Salle Avoyelles | H. R. Scivally, Tr., 1 La. Delta | June 1941 | 12- 6-4e | 55 | 3,121 | 4,755-60 | 1,634 | 5,510 | 2,389 | 175 | 43.7 |
| | | Cockburn Oil Corp. 1 Snowden | ..... | 22- 3-5e | 58 | 5,176 | 6,693-96 | 1,517 | 7,210 | 2,034 | Not completed, showing oil | |

*Oil discovery. Original gas field was formerly called Summerville.

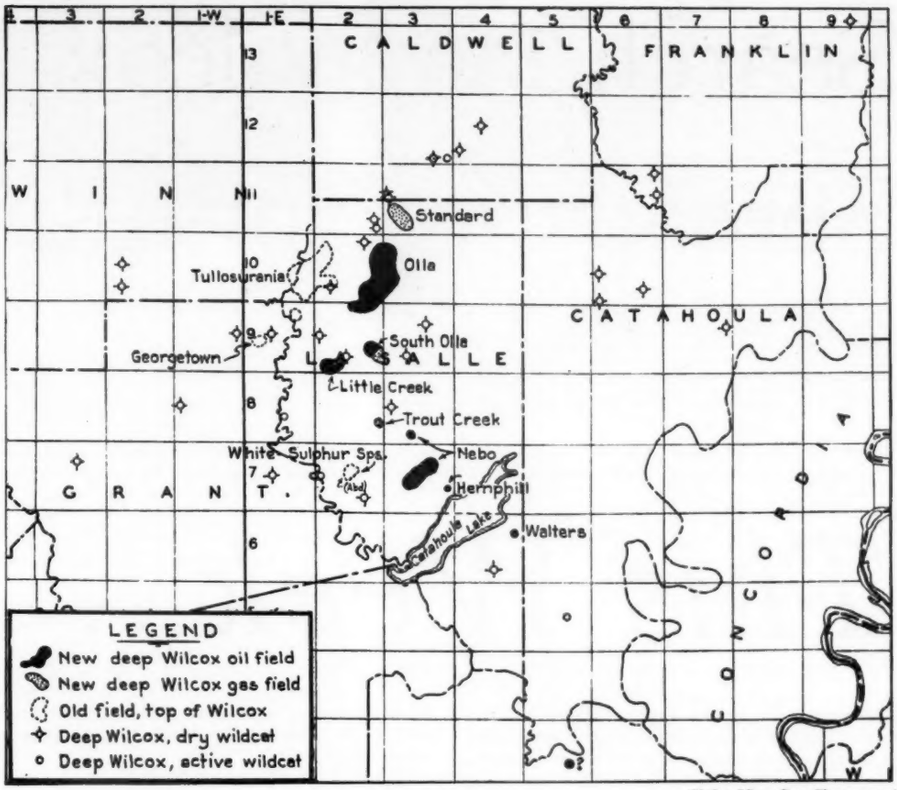
sity of wildcat tests carried to the Wilcox, in collaboration with geophysical exploration, gives operators fairly close control on the top of the Wilcox.

However, producing sands show no direct correlation with local highs on the top of the Wilcox. Neither do they show any relation with production in the top of the structure. In the Urania field, an oil-producing area in the top of the formation, lower sands have been nonproductive, and at Olla, which on top of the Wilcox is structurally higher than Urania, sands at the top of the formation show no oil. Wildcatting throughout the area has resulted in many dry holes. Still, it is expected that much new production may be found by continued exploration. A few salt domes have been discovered, principally in the eastern parishes, but no production has been found on that type of structure.

### Completion Difficult

Nature of the sands makes well completion the principal problem in developing production in the Wilcox area. Many completion methods have been tried, but no one type has been accepted as generally applicable. At present, the most promising horizon is determined by electrical log, wire-line coring and other methods, and in most cases, the sections immediately above and below it are perforated and squeezed, after which the producing sand is perforated. This method is costly and is not followed in many cases, but for lack of better methods it is employed widely at Olla and some other fields. The skill of the operator in determining best producing horizons is largely responsible for many of the wells in the area. At present, over half of the cost of a well is its completion, for drilling to the relatively shallow horizons is inexpensive.

The same difficulty in recognizing producing possibilities makes wildcatting difficult. Electrical surveys have not in all cases shown sufficient evidence of production to be used exclusively as a determining factor. Therefore, numerous other methods of detecting oil shows are employed in addition to electrical logging. Gas detectors, drilling time, considerable coring, close examination of cuttings and other checks are used, and sidewall coring is being widely accepted in subsequent examination of horizons which show possibilities on electrical surveys.




Globe Map Co., Shreveport

***The North Louisiana Wilcox play. New fields are in La Salle Parish, but wildcatting is continuing to spread in neighboring parishes. Fields such as South Olla, Little Creek, Hemphill and Walters are in initial development stages, while Olla and Nebo, although older, are still being extended in several directions. Potentialities of the Wilcox activity indicates that exploration may carry across the Louisiana line into Mississippi***

**TABLE 2—DRY WILDCATS DRILLED INTO THE WILCOX FORMATION IN NORTH LOUISIANA DURING 1940 AND FIRST HALF OF 1941**

| | Location | Elev. | Top of Wilcox | Total depth | Penetration below top of Wilcox |
|---|---|---|---|---|---|
| Caldwell Parish— | | | | | |
| Big West Drlg. Co. 1 Lowe | 36-12-3e | 161 | 1,601 | *4,009 | *2,408 |
| D. J. Crawford et al 1 La. Central | 30-12-4e | 206 | 1,674 | 2,520 | 846 |
| Critchett & Woods 1 Kyle | 18-11-3e | 211 | 1,620 | 4,975 | 3,355 |
| Gholson & Hodge 1 La. Central | 35-12-3e | 167 | 1,580 | 3,013 | 1,433 |
| Placid Oil Co. 1 Cross | 18-11-3e | 192 | 1,582 | 3,032 | 1,450 |
| V. V. Ryan 1 La. Central | 16-12-4e | 223 | 1,729 | 3,020 | 1,291 |
| Catahoula Parish— | | | | | |
| Continental Oil Co. 1 Tensas | 12- 9-7e | 61 | 3,100 | 9,215 | 6,115 |
| H. L. Hunt 1 Anderson | 31-10-6e | 113 | 2,832 | 5,213 | 2,381 |
| H. L. Hunt A-1 La. Central | 26-10-6e | 113 | 2,898 | 4,012 | 1,114 |
| H. L. Hunt 1 Southern Kraft | 19-10-6e | 112 | 2,756 | 5,250 | 2,494 |
| Sinclair Prairie 1 Peck | 39-10-8e | 83 | 3,110 | 6,023 | 2,913 |
| Concordia Parish— | | | | | |
| K. Hughes 1 Pittsfield | 41- 8-10e | 80 | 3,525 | 6,800 | 3,275 |
| Franklin Parish— | | | | | |
| H. L. Hunt 3 Chi. Mill & Lbr. | 35-14-9e | 75 | 2,512 | 5,413 | 2,901 |
| J. M. Rush et al 1 Moore | 13-11-6e | 80 | 2,548 | 4,505 | 1,975 |
| J. B. White et al 1 Dailey | 1-11-6e | 60 | 2,473 | 3,016 | 543 |
| Grant Parish— | | | | | |
| Bering Oil Co. 1 Goodpine | 18- 8-1w | 220 | 2,141 | 4,664 | 2,523 |
| Fay Oil Co. 1 Swope | 13- 9-1w | 105 | 1,622 | 3,302 | 1,680 |
| Bert Fields et al 1 McManus | 8- 8-4w | 206 | 1,510 | 3,560 | 2,050 |
| Gholson & Hodge 1 Eberlee | 16- 7-1e | 161 | 2,557 | 4,017 | 1,460 |
| John Pundt 1 Reed estate | 10- 7-3w | 101 | 2,374 | 3,153 | 779 |
| Smith, Lloyd et al 1 Swope estate | 16- 9-1e | 83 | 1,594 | 4,008 | 2,414 |
| La Salle Parish— | | | | | |
| Arkansas Fuel Oil Co. A-13 Tremont | 29-10-2e | 128 | 1,567 | 4,005 | 2,438 |
| Atlantic Refining Co. A-2 Goodpine | 28- 9-2e | 142 | 1,896 | 4,000 | 2,104 |
| Atlantic Refining Co. B-1 Goodpine | 26- 7-2e | 90 | 2,490 | 4,502 | 2,012 |
| H. C. Cummings 1 Urania | 2-10-2e | 125 | 1,580 | 2,533 | 953 |
| Delta Drilling Co. 1 Hughes | 22- 8-1e | 72 | 2,017 | *4,092 | 2,075 |
| Hope & Thompson 1 La. Central | 25-11-2e | 137 | 1,580 | 3,918 | 2,338 |
| Little River Oil Co. 1 Whatley | 18- 7-2e | 53 | | 3,724 | |
| Louark Prod. Co. 1 Tensas Delta | 27- 6-4e | 53 | 3,174 | 5,512 | 2,338 |
| Placid Oil Co. A-3 Tremont | 18- 9-2e | 133 | 1,682 | 4,041 | 2,359 |
| Sinclair Prairie 1 Goodpine | 28- 9-3e | 186 | 2,210 | 4,515 | 2,305 |
| Skipper Oil Co. 1 Whidden | 10- 9-3e | 133 | 1,895 | 3,018 | 1,123 |
| Hunter Co. 1 Pipes | 18- 8-3e | 189 | 2,330 | 4,009 | 1,679 |
| G. W. Ziegen 17 La. Central | 36-11-2e | 120 | 1,592 | 2,511 | 919 |
| Madison Parish— | | | | | |
| Gulf Refining Co. 1 Sondheimer | 33-18-12e | 93 | 1,943 | 5,545 | 3,602 |
| H. L. Hunt 1 Ayers Timber Co. | 18-15-10e | 75 | 2,200 | 3,486 | 1,286 |
| H. L. Hunt 1 Lancaster | 3-14-12e | 87 | 2,925 | 6,725 | 3,800 |
| Tensas Parish— | | | | | |
| H. L. Hunt 2 Ayers Timber Co. | 18-14-11e | 77 | 2,888 | 4,550 | 1,662 |
| H. L. Hunt 1 Chi. Mill & Lbr. | 30-13-10e | 69 | 2,787 | 3,550 | 763 |
| H. L. Hunt 2 Chi. Mill & Lbr. | 30-12-10e | 62 | 3,009 | 4,232 | 1,223 |
| H. L. Hunt 4 Chi. Mill & Lbr. | 14-13-10e | 75 | 2,850 | 4,024 | 1,174 |
| Pope & Shields 1 Panola | 34-13-12e | 82 | 3,030 | 5,503 | 2,473 |
| Winn Parish— | | | | | |
| Atlantic Refining Co. C-1 Goodpine | 29-10-2w | 207 | 1,399 | 3,553 | 2,154 |
| Atlantic Refining Co. D-1 Goodpine | 17-10-2w | 221 | 1,344 | 3,500 | 2,156 |

*Not completed.

### Extent of the Play

Even when oil shows are encountered, commercial completion is difficult. In one recent case a wildcat showing a fair "kick" in a horizon was perforated and made salt water. After squeezing and perforating again at the same level it showed salt water and some oil. Operators were contemplating abandonment, but decided to squeeze and perforate once more. One of the area's best oil-field discoveries resulted. It is believed that the cement slurry penetrated salt-water sand farther each time. The second squeeze job succeeded in shutting off all but a trace of the water.

Field wells at Olla make approximately 25 to 30 per cent of salt water. In the Nebo field salt-water contamination averages 30 per cent. All salt water is disposed by evaporation in open pits. In most cases operators use gas flares. Treating involves no particular problems. Low reservoir pressures require artificial lift in approximately 45 per cent of the wells in all fields at present and gas lift is employed in over half of the cases.

Ownership in large blocks will probably prevent sudden flurries of either wildcatting or leasing in the future, but the interest in the area is sufficient to sustain activity over several months to come, even if no new production results.

Acme

*Will it come to this? Washington, D. C., policeman warns motorist that he has violated gasoline-conservation rules because his car belches black smoke. Such are the instructions issued capital police by Coordinator Ickes*

# This Week...

**District and functional committee chairmen will meet in Washington, D. C., next Monday to discuss procedure, duties and related matters in the petroleum-coordination program. End is in sight for the period of uncertainty.**

●

**Two Japanese tankers departed from California ports without taking aboard oil cargoes. For all practical purposes the embargo seems complete.**

●

**Crude commitments to the national defense line now total 200,000 bbl. daily. Construction details are being evolved in almost daily meetings of participants.**

●

**Forty-five more tankers, including 30 United States boats and 15 Norwegian vessels, are included in the second transfer to aid Britain. The total of 95 boats assigned or earmarked for British service aggregate 850,000 tons.**

●

**The U.S.S.R. has requested diversion of two United States tankers to transport defense petroleum supplies from California across the Pacific. Secretary Ickes asked priority rating for steel to make 10,000 oil drums for Soviet service.**

●

**Texas-oil-for-Britain day, providing opportunity for operators to voluntarily produce 1 day's output for the British, has been definitely scheduled for August 17.**

●

**The Cole pipe-line bill was signed into law by President Roosevelt. He has not yet issued a declaration of defense emergency necessity for the crude line which is essential to condemnation of right-of-way.**

●

**The damper of price control was extended by OPACS over Pennsylvania lubricating oil, pegging 200 viscosity neutral at 33 cents. Indirectly, all other lube markets are affected.**

●

**Hearings were resumed today at Madison on applications from three pipe-line companies to distribute natural gas in Wisconsin. Approval of permits would open another large market for Mid-Continent gas.**

●

**Details were revealed this week on progress of Tennessee Gas & Transmission Co.'s plans to build a 1,426-mile gas line from Jennings, La., to the western part of North Carolina.**

●

**Resolution to extend the interstate oil compact 2 years is receiving attention of Congress this week. Prompt approval was asked by the White House. Rep. William P. Cole, Jr., of Maryland, who is handling the request, sees no possible delay.**

●

**Failure to find Miocene production in drilling to 14,622 ft. in Honolulu Oil Corp.'s deep Buena Vista Hills test, Kern County, California, temporarily dims outlook for another Pacific Coast reserve comparable to Kettleman Hills.**

●

**Service-station curfew in 16 eastern states and the District of Columbia is considered a softening up process to be followed in September by stricter curb on consumption. Early closing admitted to have little practical value, chiefly psychological.**

●

**A corporate life of nearly 40 years ended August 1 when Cities Service Oil Co. absorbed I. T. I. O., discoverer of the Oklahoma City field.**

# Reopen Hearings on Gas Entry Into Wisconsin

MADISON, Wis., Aug. 5.—The Wisconsin Public Service Commission will reopen its hearing August 7 on the applications of three natural-gas companies for authority to serve the state to give attorneys for competing firms opportunity for crossexamination of Natural Gas Pipeline Co. officials.

The date was set on petition of counsel for the Western Natural Gas Co. and its subsidiary, the Wisconsin Natural Gas Co., after Natural Gas Pipeline had filed an 85-page exhibit detailing the estimated cost of the Wisconsin distribution system proposed by its Wisconsin subsidiary, the Badger State Pipeline Co.

The parent company, which now serves the Chicago area, forecast a total cost of $40,615,870 in developing a 155,000,000-cu. ft. daily capacity for service of northern Illinois and Wisconsin from a new 26-in. pipe line now under construction between Texas Panhandle and Geneseo, Ill.

Cost of the Wisconsin distributing system, comprising 330 miles of piping of various sizes, was placed at $4,942,709. The company announced it plans to construct a 20-in. pipe line from Geneseo to Milwaukee, Wis., and northward, from which a 10-in. lateral would serve Rockford, Ill., Beloit and Madison, Wis., and other laterals would be extended to Michigan lake shore and Fox River Valley industrial cities.

Faced with the task of digesting more than 4,000 pages of testimony and several hundred statistical tabulations and studies, the state Public Service Commission recently ended a 6-weeks' hearing here, indicating several months will be required to decide two questions:

1. Whether or not, in the face of objections from labor, coal, railroad and dock interests, and the city of Milwaukee, it will permit natural gas to come into Wisconsin and

2. Which of three applicant pipe-line companies, if any, shall be granted a certificate of convenience and necessity to operate in the state.

The commission directed that affirmative briefs be filed on or before August 30 and reply briefs not later than September 10.

Against the objections on "economic" grounds the three commissioners will have as a guide in their deliberations the positive assurance of at least three utilities now distributing manufactured gas in the Wisconsin area that they will welcome natural gas and that they will be able to reduce the rates of consumers if it is admitted.

More complicated, possibly, will be the issue of determining which of the three competing pipeline companies shall receive the commission's blessing.

The Western Natural Gas Co., El Paso, Tex., and the Independent Natural Gas Co., Bartlesville, Okla., a subsidiary of the Phillips Petroleum Co., initial applicants for the Wisconsin certificate, rested their cases before the state board largely upon the 2,400-page record in last fall's Federal Power Commission hearing on the primary question of jurisdiction. The FPC record was incorporated bodily in that of the state hearing which approximated 2,000 pages. When the FPC decided Wisconsin was "open territory" the Natural Gas Pipeline Co. of America, which had

*(Continued on Page 91)*

# Record Increase in Motor-Fuel Demand Is Assured This Year

By J. P. O'DONNELL

NEW YORK, Aug. 4.—During the first half of 1941 the oil industry experienced the greatest 6 months' demand for gasoline in its history. With the second half under way it is probable that a new record in domestic consumption will be set by the largest volume gain on record. There is some question, however, if the increase in demand that characterized the first half of the year will be maintained through the second.

Complete reports on domestic motor-fuel consumption for the first 6 months of 1941 are not yet available. Those of the Bureau of Mines for the first 5 months show domestic consumption of 250,372,000 bbl. against 223,163,000 bbl. in the corresponding 1940 period, an increase of 27,209,000 bbl., or 12.15 per cent. The increase in consumption for this period is shown graphically in Fig 1, which compares domestic consumption for the first 5 months of each of the last 9 years.

Fig. 1 also shows the amount of the gain over the same period of the preceding year. It will be noted that in none of the previous years was there a volume gain as large as that of 1941. The largest previous increase was in 1937 when the first 5 months showed an increase of 18,817,000 bbl., or 10.7 per cent, from the equivalent 1936 period.

Individual reports on the period since May indicate that the high rate of increase experienced in the first 5 months dropped slightly in June. Oil-industry economists calculate the June consumption increase at less than that of the January-June period. Some express the belief that because of the heavy pretax buying in that month a year ago, the percentage gain for June 1941, was not as great as that of preceding months.

Scattered reports of state consumption indicate a smaller consumption increase in June than that which prevailed earlier. Reports for only four states are available and therefore are far from conclusive. However, because they are scattered — one eastern, one midwestern, and two far western states being included—they may be regarded as an indication of significance. The over-all increase for these four states is 12.9 per cent, 0.8 per cent less than state figures for the first 5 months. Available June figures compared with last year follow:

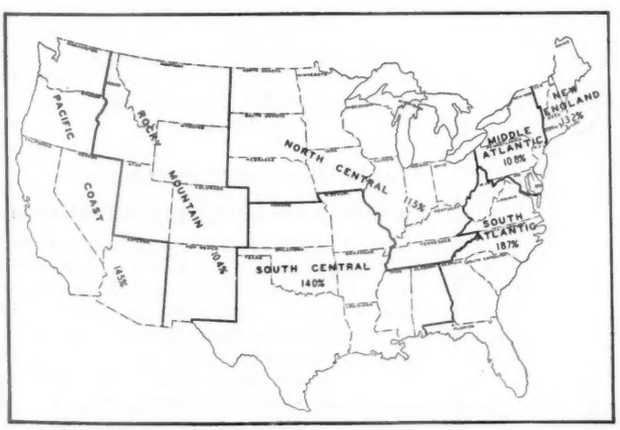
(Figures in gallons)

| State— | June 1941 | June 1940 |
|---|---|---|
| Arizona | 10,927,000 | 9,798,000 |
| California | 185,618,000 | 160,448,000 |
| Connecticut | 37,080,000 | 32,126,000 |
| Minnesota | 54,663,000 | 53,086,000 |
| Total | 288,288,000 | 255,458,000 |

Reports of consumption by states which are based on motor-fuel-tax returns indicated an increase of 13.2 per cent for the first 5 months. Since these figures are affected by local statutes, tax evasion, etc., they are not considered as reliable as those of the Bureau of Mines. However, they are regarded as sufficiently accurate to indicate the trend by states and districts.

Broken down into districts, the figures show that the largest percentage gain has been in the South Atlantic region where consumption increased 18.7 per cent. This is attributable to the concentration of army camps with their attendant activity in that area. Comparable data on consumption by districts for the first 5 months of 1941 and 1940 are given in Table 1 while the percentages of increases are indicated on the map.

These state reports reveal that California, the biggest consumer of gasoline, led in volume increase with a gain of 108,660,000 gal. for the first 5 months. Other leaders in this respect were Ohio, 70,128,000 gal.; Texas, 75,700,000; Michigan, 70,762,000; New York, 59,800,000; and Illinois, 65,845,000 gal.




*How increased consumption is distributed among districts*

**TABLE 1—CONSUMPTION BY DISTRICTS—FIRST 5 MONTHS**

(Thousands of gallons)

| District— | 1941 | 1940 | Increase | Per cent increase |
|---|---|---|---|---|
| New England | 637,126 | 562,711 | 74,415 | 13.2 |
| Middle Atlantic | 2,048,157 | 1,848,142 | 200,015 | 10.8 |
| South Atlantic | 986,454 | 831,039 | 155,415 | 18.7 |
| North Central | 3,299,904 | 2,958,923 | 340,981 | 11.5 |
| South Central | *1,758,611 | 1,542,237 | 216,374 | 14.0 |
| Rocky Mountain | 311,357 | 281,917 | 29,440 | 10.4 |
| Pacific Coast | 1,202,278 | 1,049,793 | 152,485 | 14.5 |
| Total United States | 10,061,000 | 8,908,501 | 1,152,499 | 13.7 |

*Oklahoma figures, not available before August 7, are estimated.

This year's increase in demand is attributed to the accelerated industrial activity and to the growing military requirements which are becoming a factor of more importance in the consumption picture for the first time since the last war. As usual, the important demand from the volume standpoint is that of the motoring public. Reports from touring bureaus of the oil companies reveal the heaviest demand in history for the services of these agencies as more people are vacationing in this country. And more people, as a result of increased employment, are vacationing in cars.

Because of the improved industrial activity, some oil-company economists who expect consumption to continue to improve are anticipating

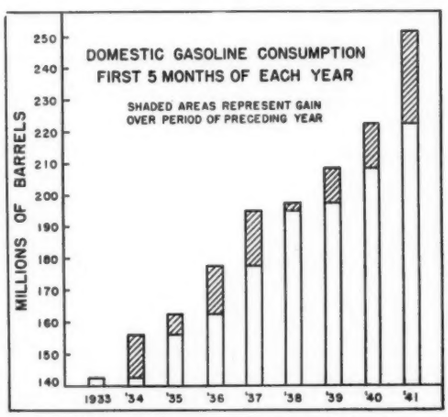



*Fig. 1—Rates of increases in demand for the past 7 years overshadowed by 1941 record*

a demand for gasoline, including aviation fuel, of as high as 660,000,000 bbl. in 1941, up 12.5 per cent from 1940. These economists find that military consumption has more than offset the loss due to the depletion of the motorist market by the draft. Other estimates of 1941 demand range as low as 645,000,000 bbl., an increase of 9 per cent from the 1940 total of 589,000,000 bbl.

The more conservative estimates are influenced by the prospect of restricted consumption in the latter part of the year, particularly in the fourth quarter, along the Atlantic seaboard. States which would be affected are those included in the New England, Middle Atlantic and South Atlantic districts. These districts include all 16 states to whose governors Oil Administrator Ickes recently wrote asking that they lead "a voluntary effort having as its aim a reduction . . . of at least 20 per cent." These states represent about 36.5 per cent of the domestic market. A reduction of 20 per cent in the fourth quarter East Coast gasoline demand would approximate 11,700,000 bbl. A reduction of this magnitude would still permit the 1941 increase to exceed that of any previous year.

Unless there are very drastic East Coast restrictive measures, a record increase in motor fuel consumption is indicated for this year. Even the most conservative estimates view a growth in demand of 55,000,000 bbl. This is more than 15,000,000 bbl. above the 1937 gain, previously the industry's high.

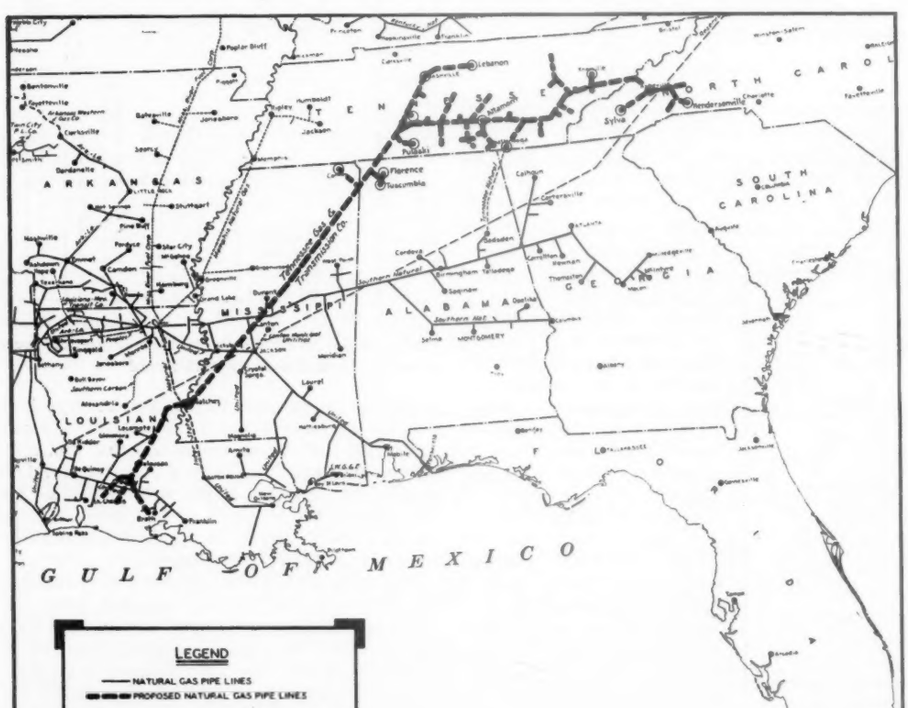
# Proposed Line Would Serve Essential Defense Industries

NEW YORK, Aug. 5.—An industrial area of vital importance in the national-defense program will be served by the 1426-mile natural-gas pipeline system which the Tennessee Gas & Transmission Co. proposes to build from southern Louisiana to Tennessee and western North Carolina. The route of the line, as shown on the accompanying map, passes through northwestern Alabama into south central Tennessee and thence into North Carolina. Successively it would serve the Tennessee Valley Authority at Muscle Shoals along the Alabama-Tennessee border, the aluminum division of the Reynolds Metal Co. and the phosphate industry, source of basic chemicals for high explosives and fertilizer, in south central Tennessee and the Aluminum Company of America east of Knoxville.

The Tennessee Valley Authority, with which the company is actively negotiating for sales of substantial quantities of gas, would use the gas at Muscle Shoals for making steam which, in turn, would be used for the production of electric power. This would provide the TVA with a conservative factor in protecting water levels which have been dangerously low. Private industries along the route, including the aluminum companies, have expressed their need and desire for natural gas.

In addition to serving defense industries whose products are of immediate concern to the federal Government, the system would likewise serve a growing area with, at present, 800,000 inhabitants who are now without natural gas. A score of laterals will carry gas to numerous communities including three large cities, Nashville, Chattanooga and Knoxville.

Curtis B. Dall, president of the Tennessee Gas & Transmission Co., said that "the company, on completion of its major financing plans, will commence actual construction of the pipe line at the earliest possible date." He added that "the company is now taking further legal steps to qualify with the various states through which the line will pass." Tennessee authorities are reported to be particularly receptive to the plan since only a small section of the extreme western part of the state is now served by natural gas.




*Route of proposed natural-gas pipe line of Tennessee Gas & Transmission Co., construction of which is to start soon. The line will serve important units in the defense program*

The project was given the green light in Washington when the Federal Power Commission dismissed the company's application for a certificate of public convenience and necessity "for want of jurisdiction." This is interpreted to mean that the Tennessee Gas & Transmission Co. is enabled to proceed with its plans without a federal permit.

The line will start in the Jennings area of southern Louisiana where the company has arranged to acquire the major part of its gas. The company has entered into purchase contracts with Continental Oil Co., Stanolind Oil & Gas Co., Union Sulphur Co. and the Atlantic Refining Co. The contracts are for a 15-year period and represent the right to exploit proven reserves of 800,000,000,000 cu. ft. While they differ in some minor respects the contracts are essentially uniform in character. Much of the gas will be obtained from deep distillate wells, now part of recycling projects. It is possible that the company may acquire additional reserves from time to time.

Cost of the line will be approximately $23,000,000. It will run northeast from the Jennings area along the Louisiana Gulf Coast, cross the Mississippi River near Natchez, pass through Mississippi and cross the northwest corner of Alabama into south central Tennessee. A branch will continue northeast to Nashville but the main line will turn east in Lawrence County, Tennessee, traverse the rest of the state and enter North Carolina where five western counties will be served.

Capacity of the system, built around a 16-in. high-pressure, electrically-welded main line, will be 110,000,000 cu. ft. per day. Compressor stations will be located approximately every 92 miles. The system will consist of a total of 1,425.95 miles of line divided as follows: main line, 845 miles; laterals, 470.5 miles; gathering lines, 95.5 miles; river crossings, 14.95 miles.

Questioned regarding the ability of the company to obtain material needed for construction of the system, Mr. Dall said that on account of the importance of the project to the national-defense program, he had every reason to believe that a high priority rating will be accorded the company in obtaining material requirements.

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## Arnold Disclaims Intention of Reducing Oil-Company Advertising

WASHINGTON, D. C.—Assistant Attorney General Thurman Arnold has denied that his recent request for exhaustive data dealing with advertising schedules, expenditures in all media and general promotional philosophy was intended to prevent oil companies from advertising. On the contrary, he declares that he would stimulate, rather than restrict, advertising. When pressed for an explanation or motive in addressing a searching questionnaire to 22 major oil companies for advertising information, Mr. Arnold said that the purpose of the inquiry is "to see how far advertising is used to compel gasoline filling stations to deal in only one line of products." He terms this method of "full-line forcing" a monopolistic practice intended to crush competition.

"I think every filling station ought to be allowed to carry and sell any or all brands of gasoline," Mr. Arnold said, "just like the soft-drink stands sell the various cola drinks . . . but I have not heard of any exclusive franchise arrangement in this field."

As for restrictive advertising, the trust buster said, "The more advertising the better from the antitrust standpoint. But I'm against using advertising as one instrument in building up monopolies on any market."

# National-Defense Pipe-Line Plans Nearing Completion

By PAUL REED

PROGRESS has been made during the past week in planning the project designated as the proposed national-defense pipe line which is to transport crude from East Texas and Wood River, Ill., to New Jersey and Marcus Hook, Pa., to offset the tanker shortage. Three names for the new company have been considered: National Pipe Line Co., National Pipe Line Co. for Defense, and National Defense Pipe Line Co.

Several changes in plans have been made. The junction point selected in Illinois is reported to be in the Salem area, at a point 3 miles south of the Salem-Odin highway, instead of at Nashville as previously announced. The size of the line from Longview, Tex., to this junction has been changed from 20 in. to 22 in. Wall thickness of all pipe for the 22-in. and 24-in. will be $\frac{7}{16}$ in. instead of ½ in. as originally planned. The factor of safety of the $\frac{7}{16}$-in. pipe, based on ultimate strength, will be 3; based on yield point it will be 4. The 24-in. pipe will be used in the section of the line from Salem, Ill., to the "Y" junction in eastern Pennsylvania. The 16-in. line between Wood River, Ill., and Salem, will have a wall thickness of ⅜ in. The reduction in wall thickness will mean a saving of about 53,750 tons which means that steel tonnage required will be considerably reduced. This will lead to operating at pressures between 750 and 850 lb. with stations spaced closer together than originally contemplated.

With the reduction in the wall thickness and working pressures one more station has been added to the project; with 60-mile spacing between stations there will be about 25 stations on the line. Present plans call for completion of the entire system as a unit. The 24-in. line will terminate at a point near Chester Springs, Pa., where smaller pipe of 20 in. and 22 in. will branch to the refining centers at Bayway and Bayonne in New Jersey and Marcus Hook, Pa.

Commitments of crude-oil shipments to be transported through the line by participating companies have now reached a total of 215,000-225,000 bbl. daily. Of this it is reported that 200,000 bbl. is East Texas oil and the remainder is Kansas and Oklahoma oil.

The new pipe-line company will be organized with $70,000,000 capital, of which 80 per cent will be obtained by a bond issue and 20 per cent will be subscribed by participating companies. It is expected that there will be no taxes for a period of 5 years and that transportation rates will be charged which will provide for amortization over a 5-year period. Cost of moving oil from East Texas to New Jersey, based on the 3¼ per cent amortization specified for crude-oil lines by ICC would be $0.156 per barrel; cost based on 20 per cent amortization would be about $0.30 per barrel.

The affairs of the pipe line are directed by an executive committee consisting of W. A. Jones, Cities Service Oil Co.; R. H. Colley, Atlantic Refining Co.; R. W. Gallagher, Standard Oil Co. of New Jersey, and Harry F. Sinclair, Consolidated Oil Co.

This committee is selecting the president and executive officers who will manage the company's operations. It is reported that among those being considered for executive positions are W. G. Heltzel, Stanolind Pipe Line Co., and J. F. McManmon, National Bank of Tulsa.

Responsibility for the construction of the line has been given to a technical committee headed by W. R. Finney, Standard Oil Co. (New Jersey) who collaborates with A. N. Horne, Empire Pipe Line Co., in matters concerning specifications, shipments of pipe, and pipe-line construction. Lester M. Goldsmith, Atlantic Refining Co., is responsible for station construction; working with him is a subcommittee consisting of C. M. Rosebrugh, Gulf Refining Co., Houston Pipe Line Div., and George N. Kinter, Tide Water Associated Oil Co. It is expected that another member will be added. J. R. Manion, Sinclair Refining Co., pipe-line department, is in charge of survey and right-of-way matters; collaborating with him are Stanley L. Westlake, Ajax Pipe Line Co.; Clay Briggs, Cities Service Co., and Frank Hadley, Sinclair Refining Co., pipe-line department.

In planning for the construction of the line, consideration is being given to dividing the work into four sections which will be confined within state lines. These sections may be as follows: Texas and Arkansas, Missouri and Illinois, Indiana and Ohio, Pennsylvania and New Jersey. It is possible that different pipe-line organizations may have charge of the work in each section.

To the list of participating companies Pan American Petroleum & Transport Co. has been added recently, raising the total number to eleven. Other companies participating in this 1,560-mile pipe line are: Socony-Vacuum Oil Co., Cities Service Co., Standard Oil Co. of New Jersey, Atlantic Refining Co., Tide Water Associated Oil Co., Shell Oil Co., Inc., Gulf Oil Corp., Texas Corp., Consolidated Oil Co., and Sun Oil Co.

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# Peg Price of Pennsylvania Lubes

OIL CITY, Pa., Aug. 4.—Leon Henderson, price administrator, in effect, pegged price of Pennsylvania neutral, 200 viscosity, 25 pour, at 33 cents in telegrams Monday to refiners asking for no sales above that price without previous discussion with his office. It is expected that refiners generally will comply with the request. Thirty-three-cent price is about the current level paid by contract customer.

Mr. Henderson's wire follows:

"Repeated advances in the quotations for Pennsylvania Grade neutral lubricating oils are futile in calling forth any substantial increase in available supply and consequently represent an example of inflationary tendencies which should be restricted. Accordingly we are asking you to make no sales without previous discussion of the situation with this office of neutral 200 viscosity (at 70) 3 color, 25 pour test above 33 cents per gallon with other grades and classifications to be maintained at their existing differentials. Your cooperation with this office in this regard will be appreciated greatly."

Demand for high grade lubricating oils for the defense program and increased industrial and civilian activities is absorbing every gallon produced of Pennsylvania neutrals, Mr. Henderson explained. It is estimated that only slightly more than 5,000 bbl. per day of these neutrals are produced.

A succession of increases in recent months has carried refinery prices from about 22 cents per gallon to 42 cents a gallon and higher. It is believed that sales at recent high prices for the most part have represented interrefinery transactions and will not be reflected in prices which the ultimate consumer is charged.

Nevertheless, Mr. Henderson said, since no appreciable addition to supplies of Pennsylvania neutrals can possibly result from higher prices, continued advances can accomplish nothing more than to stimulate inflation.

The OPACS order to Pennsylvania refiners will tend to arrest other lubricating-oil prices since markets throughout the eastern part of the country move in direct relation.

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# Move to Extend Oil Compact

WASHINGTON, D. C., Aug. 4.—A resolution calling for the extension for an additional 2 years of the interstate oil compact was introduced in the House this afternoon by Rep. William P. Cole, Jr., of Maryland.

Mr. Cole introduced the resolution at the request of President Roosevelt, who expressed gratification over the fact that 11 states are now members of the compact. Since the original compact was executed in August 1935 between the states of Oklahoma, Texas, New Mexico, Illinois, Colorado, and Kansas, it has been twice extended and renewed for 2-year periods, the last extension period expiring September 1, 1941. Additional states now members of the compact are Michigan, Arkansas, Louisiana, New York, and Pennsylvania.

"It is interesting to note that the original compact, first ratified by six states, has now been ratified by 11 states," Mr. Roosevelt stated in his message to Congress requesting the extension. "The increasing membership in this compact is particularly heartening in view of the need for the conservation of these petroleum resources."

Commenting upon the message, Speaker Sam Rayburn, of Texas, said: "It is particularly gratifying at this time to find 11 of the great states of our union, controlling most of our petroleum resources, joining together in a determination to protect our vast and valuable oil possessions, at this time, because of conditions throughout the world.

"I hope the Compact Commission will direct its attention to the situation in the great eastern portion of our country, where drastic curtailment in use of oil is suggested as necessary. We have an abundant supply of oil, and this strong state effort can, I am sure, assist materially in transporting it in sufficient quantities to the major consuming section of the United States."

Mr. Cole held a meeting of his petroleum subcommittee of the House interstate and foreign-commerce committee Tuesday to consider the resolution. He stated that he could see no reason why the matter should not be acted upon expeditiously.

# STATE CAPITALS...

## CALIFORNIA

DEVELOPMENTS OF IMPORTANCE have tumbled over one another since the Conservation Committee of California Oil Producers established the allowable crude production for the month of August, but there is no indication that any change is to be made.

Action of producers, however, indicates that something may develop to cut back production as many operators have suddenly started overproducing.

This action is believed to reflect the opinion that it will be necessary to take some drastic action and they desire to produce their monthly allotment before the lid is clamped down.

By a strange coincidence the committee, in the face of probable unfavorable developments, stepped up the state's allowable crude-oil production to 610,000 bbl. daily and raised the top well allowable to 145 bbl. per day.

Developments during the next 3 weeks should determine what action will be taken when the September allowable figure is discussed. Every development has been bearish during the past several weeks and this was climaxed by the embargo against shipments to Japan. Too, there is every indication that Pacific Coast markets may be restricted despite every attempt to maintain normal deliveries. Much depends on what action the petroleum coordinator takes on other West Coast tankers.

## OKLAHOMA

DAILY AVERAGE PRODUCTION of 415,000 bbl. during August was authorized in the Corporation Commission proration schedule, the same rate that prevailed in July. The U. S. Bureau of Mines estimate of demand for Oklahoma crude during the current month was 492,000 bbl. daily.

## TEXAS

ALLOWABLE TOTALING 1,412,121 bbl. daily was listed last Saturday by the Railroad Commission for the 97,189 producing wells in Texas. The current allowable figure is 1,097 bbl. daily higher than the rate of production in August recommended by the United States Bureau of Mines. The allowables were 50,521 bbl. above the bureau's recommendation but a normal underproduction of 3.5 per cent reduced the actual overage to 1,097 bbl. daily.

The number of producing oil wells increased 278 during the week ended August 2.

Profiting heaviest from the new order was the East Texas region where allowables rose 16,078 bbl. for a total of 350,841 bbl.

Next came West Texas, gaining 10,925 bbl. for a total allowable of 244,138 bbl. daily.

Gulf Coast Texas picked up 10,658 bbl. for a total of 260,372 bbl.

Southwest Texas with 228,025 bbl. allowables had gained 8,619 bbl.

North Texas allowable gains were 3,656 bbl. bringing the total to 117,385 bbl. daily.

East Central Texas allowable rose 1,181 bbl. to 86,016 bbl. West Central Texas gained 1,096 bbl. for a total of 47,407 bbl.

The Panhandle, still with 5 shutdown days, had a slight gain of 347 bbl. for a total of 77,937 bbl. daily.

WEST TEXAS CONTINUES to lead the state in new drilling operations as indicated by permits issued by the Railroad Commission. Drilling permits issued in Texas for the week ended August 2 totaled 299, an increase of 39 over the previous 7-day period.

West Texas operators received 74 new permits. Most active areas, as indicated by the number of permits, were Hockley County with 17 new operations, Pecos County, 14 and Crockett County, 13.

East Texas was above recent weekly totals, listing 26 permits as special exceptions to the regular spacing pattern. This total included 17 new tests in Rusk County, seven in Gregg County and two in Upshur County.

In the West Central Texas area, 30 locations were reported, while the East Central district listed an even 20.

Southwest Texas operators listed 66 locations, Starr County leading with 16. In the Gulf Coast area, operators obtained approval for 30 new locations.

Clay County's 15 new wells topped all counties in the North Texas district which showed a total of 50.

In the Panhandle, 18 new wells were listed, centered in Gray County where 13 wells were planned.

ARRANGEMENTS HAVE BEEN MADE for federal clearance of 1 day's crude-oil production from Texas wells to aid Britain and the Railroad Commission has now designated August 17 as the date for the event which has been discussed for 60 days. The commission originally designated August 10 as Texas-oil-for-Britain day but arrangements were canceled owing to incomplete plans for transfer of the oil. The contribution of production is strictly a voluntary proposal although it has been given approval by the commission, President Roosevelt, Coordinator Ickes and the governor's office. Jerry Sadler and Olin Culberson, members of the Railroad Commission, issued this statement:

"We urge every patriotic Texas operator to cooperate in this defense program by donating their production on August 17 to Great Britain. This is a patriotic cause that has not yet been surpassed in this nation's 'Aid to Britain' plan.

"Texas is setting the pace for defense aid and we're going to continue to do so. We stand ready, willing and able to see that the battle of the Atlantic is fought with everything except American blood."

### TEXAS STATISTICIAN . . .

*CLINTON OWSLEY has been made director of production, accounting and oil statistics in the petroleum conservation organization of the Texas Railroad Commission at Austin. He has been associated with the commission since 1932. During his 9 years of service Mr. Owsley has been traveling auditor, gas utilities division; deputy supervisor of the oil and gas division; chief petroleum accountant, oil and gas division; chief accountant, gas utilities division and acting director, gas utilities division. His most recent promotion involves duties of determining the volume of oil produced and its disposition*

## MISSISSIPPI

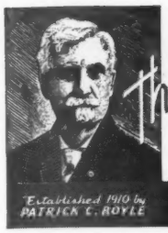
THE MISSISSIPPI OIL AND GAS BOARD held a hearing in Jackson on August 4 to consider the possibility of prorating Mississippi oil production. This concerns the Tinsley field directly, for that is the only major oil reserve yet discovered. Daily average production from the 118-well field has exceeded 40,000 bbl. daily for the past several weeks, and last week ran 47,740 bbl. per day, a new production peak.

Although voluntary proration was agreed upon by producers earlier in the field's history, limiting production to 300 bbl. per well per day, this no longer is recognized by some operators who produce as much as 600 bbl. per well per day. The field has never had proration by a state body, but has been generally restricted by its outlet. The state's action was followed by an operators' meeting August 7 to discuss the matter.

## ARKANSAS

THE ARKANSAS OIL AND GAS COMMISSION held a hearing August 6 and received testimony regarding field rules for the Macedonia area of Columbia County, recently proven for gas-condensate production. The spacing pattern set for the new area will be of greatest importance and wide spacing is expected to be ordered.

The August allowable was fixed at 74,428 bbl. daily, an increase of 680 bbl. over the July production figure authorized by the regulatory board but still 6,272 bbl. below the U. S. Bureau of Mines estimated demand for the current month.




The OIL AND GAS JOURNAL

PRODUCING REFINING NATURAL GASOLINE PIPE LINE

Published weekly by The Petroleum Publishing Company at Tulsa, Oklahoma

# Consumers Will Ask

The daily threats out of Washington regarding petroleum rationing are adding to the general confusion as to the government's oil policies.

Customers along the Atlantic seaboard want to know why they are threatened with a one-third reduction in their gasoline consumption and their suppliers cannot advise them because they do not know themselves.

Eastern operators gave their support to the night closing of stations. At their own expense they are also calling upon customers to adopt motoring practices which will promote the most efficient use of gasoline. They are studying other operating changes which will conserve materials, motor transportation, electric power and labor.

But these adjustments in merchandizing policies of course will not bring about a 33 1/3 per cent reduction in gasoline consumption in the Atlantic seaboard areas which the petroleum coordinator insists is needed.

Such a drastic reduction in gasoline consumption is not necessary as a result of the requisitioning of tankers already removed from coastwise service. This loss has been largely compensated for through offsetting actions now being taken by oil-transportation companies.

Thus, the proposed rationing must mean that more withdrawals from tanker capacity are in the making.

Governmental officials apparently have little appreciation of the serious economic and other reactions that will result through a large curtailment in motor transportation in an area which includes several of the country's largest industrial and trade centers. A one-third curtailment in rail facilities in that section would be less important in its far-reaching significance.

Petroleum rationing springs from the attitude that a large part of gasoline consumption is unnecessary. An unbiased investigation will show that the luxury consumption of motor fuels represents a small fraction of the total. The contribution of millions to the economic stability of this country centers in their use of motor power.

We venture the prediction that before the car owners of 16 states and the District of Columbia consent to a large reduction in the use of a commodity which plays an essential part in their day-to-day living, they will have to know many things they don't know now.

They will want to be advised of the details of how a tanker shortage developed after a year and half of war, during which period, according to available reports, the war losses did not exceed new construction. This explanation, when it is made, should take into consideration that practically all of continental Europe has been withdrawn from oil trade due to war developments. The total movement of petroleum outside the Western Hemisphere has declined steadily since the war started.

Consumers naturally will be curious regarding the changes in the production and movement of petroleum products within the Eastern Hemisphere which would necessitate a reduction of more than 200,000 bbl. daily in this country's gasoline consumption, a quantity which exceeds the entire consumption of all petroleum products in the British Isles.

The latest explanation, that future tanker removals will not be made public because it would involve military information, is not convincing in view of the flood of reports on war and defense activities appearing daily in the press and movies and on the air.

A statement of fact clearly showing the justification of the government's plan will end all doubts and rumors and bring any needed cooperation from consumers, regardless of sacrifices involved.

This leads to the general conclusion that it will be well for Washington to keep in mind that while it deals with thousands in its regulation of producers, refiners and transporters, the number jumps to millions when it starts tampering with consumer outlets.

*H. R. STRAIGHT*
*President, Cities Service Oil Co.*

*A. W. AMBROSE*
*Executive vice president, Cities Service Oil Co.*

# *Cities Service Completes Absorption of I. T. I. O.*

ABSORPTION of Indian Territory Illuminating Oil Co., a potent unit in southwestern oil operations for nearly 40 years, was completed August 1 by Cities Service Oil Co., which had owned a controlling interest in the company since 1939.

Burdette Blue, of Bartlesville, Okla., who succeeded H. V. Foster, son of the company's founder, as president of I.T.I.O., is moving to Tulsa and will act in a consulting capacity on legal problems for several Cities Service operations.

Movement of I.T.I.O. into the fully integrated structure of Cities Service gives the continuing concern gross production of more than 60,000 bbl. daily and net of 50,000 bbl. daily, it was announced by H. R. Straight, of Bartlesville, president of Cities Service Oil Co.

R. L. Morton, I.T.I.O. vice president who took an important part in the merger, was made a director and vice president of Cities Service.

A. W. Ambrose, vice president and director of Cities Service, is given an extension of duties in promotion to the position of executive vice president of the continuing concern.

Directors of Cities Service made L. A. Lynd treasurer. He had been a director and assistant treasurer for some time. T. P. Steeper of Bartlesville was elected a vice president. M. A. Wilson of the Cities Service organization and E. B. Emenhiser of the I.T.I.O. organization were made assistant secretaries.

Nucleus of I.T.I.O.'s more recent successes which brought it to the front in Mid-Continent producing operations during the middle and late twenties were five fields in the Seminole district and the Oklahoma City field which the company discovered. I.T.I.O. had large holdings in Kansas, West Texas, Colorado and other states in addition to its Oklahoma properties. The company was founded by the late H. V. Foster in 1902. The Foster family directed activities until 1935, although the depression of 1929 and 1930 produced a financial strain on the company that resulted in Cities Service acquisition of stock control.

Simultaneously with the I.T.I.O. transfer, W. Alton Jones, of New York, president of Cities Service Co., announced a plan under which it will retire from the utility business and concentrate its operations in the petroleum industry.

The plan, filed with the Securities and Exchange Commission, conforms with the Public Utility Holding Company Act of 1935. Action is subject to approval of stockholders and, if ratified, will become operative January 1, 1942. Electric-light and power subsidiaries will be divided into three regional companies.

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## DEATHS

**JOHN F. HORNE,** 92, well-known retired pipe-line foreman and inspector, died at Tulsa August 2 as the result of injuries inflicted when he was hit by an automobile the day before. Starting in the Titusville, Pa., field as a boy, he continued to work on pipe lines through the development of eastern and Mid-Continent fields until he retired 15 years ago. After coming to Oklahoma in 1904 he served as foreman for a number of contractors and inspector for such organizations as Prairie Pipe Line Co., Oklahoma Pipe Line Co., and Texas Pipe Line Co. He worked on the gas line to Indianapolis 50 years ago which was a famous project among old-time pipe liners.

**WILLIAM RHODES DAVIS,** colorful oil operator, whose activities in the field took him to many foreign lands, died in his hotel suite in Houston, Tex., August 1. Death followed a heart attack. Mr. Davis was born 52 years ago in Montgomery, Ala. At the age of 24 he organized an oil and gas company in Muskogee, Okla., and later worked up a zinc company in Joplin, Mo. Following the World War he began operating in Tulsa as an oil lease broker, and was associated with several companies he helped organize. He had been operating in Texas since 1936, and 2 years ago moved his office from New York City to Houston.

Mr. Davis had established refineries in Sweden, Finland and Germany. He had large holdings in Mexico and his company, W. R. Davis, Inc., maintained offices in London and Mexico City. He branched into foreign trading more than 10 years ago. When the Mexican Government expropriated foreign oil holdings in 1938, Mr. Davis, a big operator there, successfully negotiated a deal with the government, in which he was able to retain his properties.

Survivors include his widow and two sons.

**WILL C. RUSSELL,** 72, Tulsa, who had been an oilfield worker and contractor, operating chiefly in Oklahoma until his retirement some years ago, died July 30 at his home from complications resulting from a stroke suffered about 7 years ago. He was a pioneer Tulsan, having lived in that city since 1903. The widow and two sons survive.

**P. F. STAHL,** 45, employe of the Texas Co., died last week, following injuries received when his automobile overturned on the Smackover-Camden highway in Arkansas. He had been employed by the Texas Co. for about 20 years. His wife, two sons and a daughter survive.

**EDWIN S. SMITH, JR.,** 31, geologist and independent oil operator of Vernon, Tex., died at his home Monday night, July 28. A resident of Vernon all of his life, he attended the University of Oklahoma and the El Paso School of Mines where he majored in geology. He was the discoverer of the Castlebury pool southeast of Vernon and two other small pools in the area—the Phillips-King-Waggoner area and the Lawson & Levell pool. He is survived by his widow and his father.

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## THE MARKETS*

CRUDE OIL: Payment of premiums for connections in various producing areas, particularly in Middle West oil states continues to dominate the outlook for crude. Crude markets on the Pacific Coast and in those areas delivering to the Gulf Coast are less virile than in the interior because of the Japanese embargo in the first case and the transportation situation in the other.

REFINED PRODUCTS: A ceiling of 33 cents on 200 viscosity neutrals in the Pennsylvania district was requested Monday by OPACS. The request from Leon Henderson, price administrator, asked that other grades of Pennsylvania lubricants be priced in their normal relationship to the specifically mentioned products. Lubricating-oil markets throughout the eastern part of the country will be influenced since Gulf Coast and Mid-Continent products normally bear a constant relationship to Pennsylvania prices.

TANK WAGON AND POSTED DEALER: Details of a general advance of 0.25 cent per gallon in Kentucky, Mississippi, Alabama, Georgia and Florida were reported this week. Terminal-gasoline prices have been advanced on the East Coast and fuel oil quotations were raised 0.25 cent per gallon throughout Ohio.

FINANCIAL: A new high for the current upward movement of oil securities was established. Average of 30 representative stocks for the week ended August 2: High, 27.88; low, 26.98; close, 27.30. Week ended July 26: High, 27.86; low, 26.52; close, 27.38.

*Detailed information in Market Section.

# PENBERTHY PRODUCTS

## Reflex

## DROP FORGED STEEL LIQUID LEVEL GAGE

EMPTY SPACE SHOWS **WHITE** | LIQUID SHOWS **BLACK**

* * *

## Transparent

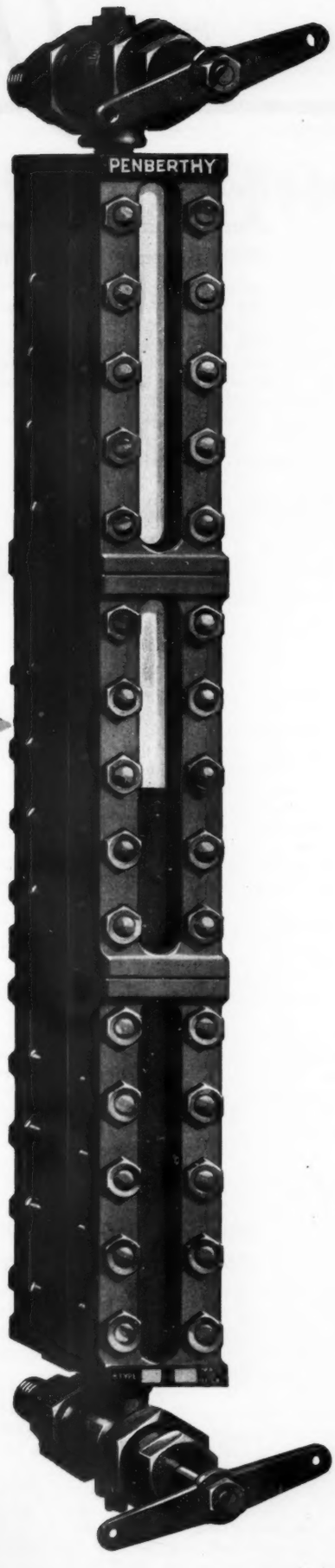
## DROP FORGED STEEL LIQUID LEVEL GAGE

**USED TO OBSERVE COLOR AND DENSITY OF LIQUIDS UNDER HIGH PRESSURES, AND/OR TEMPERATURES**

**These gages are made of alloy temperature resisting steel and are of the highest quality throughout. Liquid chamber (both single and multiple section) is made from a solid block of steel to assure perfect alignment and rigidity. Frame has extra heavy beam at each end and glass chamber is accurately machined to contour of glass providing full metal backing for gaskets. Gage valves are drop forged steel with stainless trim.**

**These gages are available in any length and for various pressures and temperatures. All Penberthy gages conform with A. P. I.—A. S. M. E. requirements.**

**PENBERTHY INJECTOR CO.**
**DETROIT, MICHIGAN**
*Canadian Plant:* WINDSOR, ONTARIO



# International

## Venezuela . .

### Standard and Lago Raise Daily Average Production

COMBINED daily average production of the Standard Oil Co. of Venezuela and Lago Petroleum Corp. increased 27,715 bbl. to 319,979 bbl. in May. The combined exports of the two companies also increased 1,101,503 to 9,018,593 bbl. May exports of the Standard of Venezuela totaled 2,633,030 bbl. and those of Lago, 6,385,562 bbl.

A summary of the daily average production of these companies in May follows:

(Figures in United States barrels)

| Area— | S.O.V. | Lago | Total |
|---|---|---|---|
| Lake fields | 7,583 | 214,233 | 221,816 |
| Other western fields | 4,971 | ..... | 4,971 |
| Eastern Venezuela | 86,662 | 6,530 | 93,192 |
| May total | 99,216 | 220,763 | 319,979 |
| April total | 97,193 | 195,071 | 292,264 |
| Change | 2,023 | 25,692 | 27,715 |

A record of the well completions during May in which these companies are interested follows:

| Area— | No. | Average initial (b/d) | Average total depth (ft.) |
|---|---|---|---|
| Jusepin | 4 | 503 | 4,885 |
| San Joaquin | 2 | 1,498 | 5,826 |
| Oficina | 1 | 702 | 5,510 |

SEVERE rains, reminiscent of those of 7 or 8 years ago which established precipitation records for Venezuela, constitute a barrier to wildcat operations in the eastern part of the country. These rains, which have persisted for the past month, have slowed operations throughout the area. Some test-well locations have been virtually isolated by the almost impassable roads.

Among the drilling operations in this part of the country which are being watched closely is the Quiamare test of Mene Grande Oil Co. This test, in northern Anzoategui, was reported drilling at 6,700 ft. last week, still in a tight shale formation. This company is also operating two rigs in the Santa Rosa and two in the Leona-Tigre areas.

The Texas Co. (Venezuela), Ltd., is still testing at several intervals in the 1 Rincon Largo which has been bottomed at 9,631 ft. The derrick has been completed for 2 Rincon Largo, but operations have been held up pending the results obtained in testing No. 1.

## Cuba . .

### Motembo Naphtha Well Flows 684 Bbl. per Day

PRODUCTION of 684 bbl. of naphtha in 24 hours from Centralia Naphtha Co.'s new completion in the Motembo field, in Lot 1, Ampliation of Faust claim, ranks it as one of the best producers in Cuba's most important reserve.

The Motembo field, according to a communication from Charles Ginart, general manager of Centralia Naphtha, produces more than 1,000,000 gal. of naphtha per month. Production sells for 20 cents per gallon at the well.

Centralia Naphtha Co.'s No. 5, which gaged 684 bbl. of production in 24 hours, ignited July 15 but has been extinguished and placed on a regular operating basis. Current output is reported to be nearly equal to the initial flush.

Mr. Ginart declared that current production from the Motembo field is more than the local market requirements. He suggested that Coordinator Ickes use his influence with the three major marketers in Cuba in obtaining an outlet for the surplus production.

#### Production of Distillate Increases

Production of "distillate gasoline" in the Motembo field, located in the Provinces of Matanzas and Las Villas, has shown a steady increase in the past few years. Current production is at the rate of 455 bbl. daily.

According to unofficial statistics, total output of Motembo gasoline in 1940 amounted to 135,715 bbl., compared with 104,170 bbl. in the preceding year, with estimated production during 1941 at a rate in excess of 166,650 bbl. At present there are about 200 wells in operation in the Motembo field. Approximately three wells must be drilled in order to obtain one productive well.

*Centralia Naphtha Co.'s new distillate producer in the Motembo field in Cuba ignited shortly after it was completed for initial of 648 bbl. daily. The well since has been brought under control and is now on regular production for one of the best in the field*

Since 1935 Motembo distillate has accounted for a progressively increasing proportion of the motor fuel sold in Cuba, amounting to 10.5 per cent of the total in 1940. The competitive status of refined gasoline has been adversely affected by the large spread between the taxes applied on refined gasoline, and those collected on distillate produced in Cuba. The increased sales of Motembo distillate during recent years have been made only because of the very substantial price differential favoring the domestic natural product. In this connection, it is interesting to note that one of the provisions of the tax-reform bill under discussion in the Cuban Congress, would modify the relative tax status of the various types of gasoline and fuel mixtures, and if enacted into law would, according to sources in the refined-gasoline trade, further unbalance the competitive position of this gasoline versus the Motembo product, and very likely induce more vehicle owners to switch to the latter fuel.

## Turkey . .

### Motor - Fuel Consumption, Mostly From Rumania, Gains

GASOLINE imports during the first 3 months of 1941 totaled 103,055 bbl., compared with 93,255 bbl. in the corresponding period of 1940, according to official Turkey statistics. Rumania was the principal source of supply, with 87,015 bbl. Palestine followed, furnishing 11,755 bbl. Gasoline imports from the United States declined to less than 10 bbl., from 50 bbl. in the first 3 months of 1940.

Arrivals of kerosene into Turkey reached 147,015 bbl. during the 1941 first quarter, in comparison with 111,800 in the same period of 1940. Imports from Rumania increased to 130,565 bbl. against 42,565 a year ago. No kerosene was received from the United States during the first quarter of 1941. Turkish imports from the United States during the corresponding quarter of 1940 are recorded as 53,390 bbl.

Turkish imports of light fuel oils declined to 46,725 bbl. during the first 3 months of 1941, from 80,500 bbl. in the same months of 1940. Egypt and Rumania were the leading suppliers, with 20,015 and 19,300 bbl., respectively (3,290 and 58,820 bbl. in the 1940 period). While the United States was not a source of supply during the 1941 period, it furnished 15,885 bbl. during the first quarter of 1940.

An important gain was shown during the 1941 first quarter in heavy fuel oil imports into Turkey of 26,640 bbl., over 1940 first-quarter imports of 6,095 bbl. Rumania furnished 26,600 bbl., compared with only 4,760 bbl. in the first 3 months of 1940. The United Kingdom supplied 35 bbl. (none in the 1940 period).

## Burma . .

### Crude Production Declines Slightly, Official Data Show

CRUDE-OIL production of 7,737,900 bbl. for 1940 was recently reported in official figures from Burma. The production last year was slightly below that of 1939 which totaled 7,873,455 bbl.

Production in the third quarter of 1940, excluding the Kyaukpyu field, data for which are not yet available, amounted to 1,947,815 bbl., compared with an output of 2,032,820 bbl. in the third quarter of 1939. In the September quarter of 1939, the Kyaukpyu field produced 75 bbl.

Burma's crude production during the first 9 months of 1940, excluding Kyaukpyu, is recorded as 5,849,100 bbl., in comparison with 5,701,100 bbl. in the corresponding months of 1939. Production of the Kyaukpyu field amounted to 240 bbl. during the 1939 period.

Production during the first quarter of 1940 amounted to 1,888,750 bbl., against 2,172,330 bbl. in the fourth quarter of 1939.

# Watching WASHINGTON

By HENRY D. RALPH

**New oil-export policy denies aviation fuel or lubricating oil to Japan, and limits purchases of other products to prewar amounts . . . Steele selected to fill vacancy caused by Holland appointment . . .**

WASHINGTON, D. C., Aug. 5.—The oil-export policy of the United States has been changed by tightening the definition of aviation motor fuel and aviation lubricating oil and by limiting exports of all other petroleum products to "usual or prewar quantities" except to destinations in the Western Hemisphere, the British Empire, and "the unoccupied territories of other countries engaged in resisting aggression."

Thus, without being mentioned by name in the official documents, Japan is prevented from obtaining any aviation gasoline or supplies from which it can be made, and other purchases of petroleum products are limited to "prewar" amounts by strict license supervision which can be tightened at any time. In addition to obtaining an export license from the State Department, the Japanese must also obtain a license from the Treasury Department for the transfer of any funds or credits to pay for each individual shipment of petroleum.

The policy which the State Department will follow in granting or denying licenses for the exportation of petroleum products has not been announced but can be inferred from the language of President Roosevelt's announcement of the new policy, which said:

"The action will have two immediate effects. It will prohibit the exportation of motor fuels and oils suitable for use in aircraft and of certain raw stocks from which such products are derived to destinations other than the Western Hemisphere, the British Empire and the unoccupied territories of other countries engaged in resisting aggression. It will also limit the exportation of other petroleum products, except to the destinations referred to above, to usual or prewar quantities and provide for the prorata issuance of licenses on that basis."

Two Japanese tankers arrived last week at Pacific Coast ports but departed promptly without taking aboard cargoes of petroleum for which they had made the 4,500-mile voyage. Departure of the two boats, one from San Francisco and the other from San Diego, indicated that they had called for types of oil specifically embargoed by the president's order or that officials are declining to license oil exports regardless of quality.

Aviation motor fuel, aviation lubricating oil, crudes and fractions from which they may be made, and tetraethyl lead and other blending agents were subjected to export license control about a year ago, and while figures have not been published it is assumed that few, if any, licenses were issued to permit Japan to obtain these commodities. Other petroleum products, however, were not subject to license and Japan was able to purchase lower grades of fuel suitable for use in her airplane engines.

On June 20, 1941, practically all other petroleum products were added to the export license list, but general license GEH was immediately issued permitting their export to any country except from Atlantic ports, and general license GEG permitted exports from Atlantic Coast ports to all the American republics and the Netherlands and Danish colonies in the Western Hemisphere. This action was taken to prevent Japan from obtaining petroleum products at Atlantic ports because of the tanker shortage, but did not interfere with exports to Japan through other ports.

Action taken over the week end included: A new definition of aviation fuels and lubricants; revocation of general license GEH; revocation of individual licenses for the export of petroleum products subject to license before June 20; and return of pending applications for such individual licenses. The revocations in all cases do not apply to the Western Hemisphere, the British Empire, and countries resisting aggression. General license GEG, which was to expire July 31, has been extended indefinitely. The effect of these various actions is to prevent any shipments to Japan except under a new individual license, and new licenses will be issued only for export of "prewar" quantities.

The administrator of export control issued Export Control Schedule 15, which rearranges the definitions of petroleum products subject to license and which also changes several of these definitions. The changes made are in the definitions of motor fuel, medium-viscosity-index grade lubricating oil, low-grade aviation gasoline, and crudes from which these may be made.

Instructions have also been sent to collectors of customs to not permit the export of any liquid petroleum product under general licenses GEG or GEH without an affidavit from the shipper that they will not yield aviation gasoline or aviation lubricating oil. Collectors are instructed that this will apply to most types of gasoline, a relatively large amount of crude oil, most lubricating oil of Pennsylvania grade, and many of the most highly refined lubricants of Mid-Continent origin. The effect of this action is to limit the types of products which can be exported even to those destinations where the general licenses still apply.

## Steele Made Director of Conservation Division

JACK W. STEELE, chairman of the Federal Tender Board at Kilgore, Tex., has been selected to serve as acting director of the Petroleum Conservation Division to fill the temporary vacancy created by the appointment of George W. Holland as special assistant to Secretary Ickes as petroleum coordinator for national defense.

*JACK W. STEELE*

Mr. Steele will continue to serve as chairman of Tender Board No. 1 at Kilgore. The Petroleum Conservation Division and the Federal Tender boards are the agencies of the Department of the Interior maintained for the administration of the Connally "hot oil" law.

After graduating from the Michigan College of Mining in 1904, Mr. Steele engaged in mining engineering until 1913 when he first became interested in petroleum. In 1922, he was made senior petroleum engineer for the Bureau of Mines.

The Colombian Government engaged Mr. Steele in 1929 as technical adviser in the formation of new oil laws and in 1930, he went to Angola, Portuguese West Africa as superintendent of exploration operations.

He was named deputy supervisor for the United States Geological Survey at Roswell, N. M., in 1933, and later that year was chosen chairman of the technical advisory committee for the Petroleum Administrative Board. He also served as secretary of the production and transportation committees of the industry's advisory board which assisted Secretary Ickes in the administration of petroleum problems. Mr. Steele was appointed chairman of the Federal Tender Board at Kilgore in February, 1936.

# Larkin Casing Centralizers

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*Larkin Spiral Type Centralizer*

*Larkin Straight Type Centralizer*

**Keeping your casing string "in the groove" is not only a basic requirement of a successful cementing operation, but one of the most important points of your cementing job. A uniform annular space around the pipe, near the shoe, is a uniform cement ring in the making . . . and this uniform ring of cement between the casing and formation means a minimum of channeling.**

**Casing running problems vary just as depth, formation, and other conditions vary in different areas . . . and Larkin has met this varied problem with two distinct types of Casing Centralizers, pictured here. They are alike in that both are extremely simple in design, easily applied, and both ruggedly constructed of fine materials for dependable operation. The spiral type is 42 inches long; the straight type 18 inches. Each matches its own particular problem with which you are familiar.**

**You'll find full description, specifications, and prices on page 1427 of your 1941 Composite Catalog, and in the Larkin Catalog. Both types are available through your Supply Store or any Larkin Warehouse.**

LARKIN

LARKIN PACKER COMPANY, INC., St. Louis, Mo.

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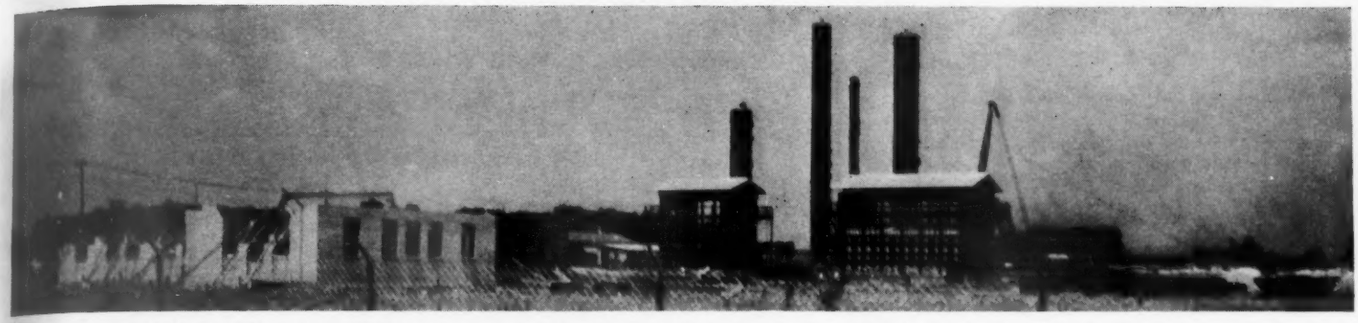

*Construction view of Rock Island Corp.'s 5,000-bbl. refinery at Indianapolis, Ind. Crude for the plant will originate in the Mid-Continent, Indiana and Illinois fields*

# Refinery Expansion

## Two New Crude Units Are Completed at Bayway, N. J.

Standard Oil Co. of New Jersey has completed two crude units having an aggregate daily capacity of 60,000 bbl. at its Bayway, N. J., refinery. Installation of the crude units was the major step in an expansion program announced last fall.

A 16,000-bbl. per day heavy naphtha rerun unit is also being completed at the Bayway refinery and a U.O.P. nonselective polymerization plant which will produce 2,000 bbl. of 9½ lb. R.v.p. gasoline per day is under construction.

Contracts have also been let for the construction of similar polymerization plant of half of the capacity of that at Bayway for the company's refinery at Everett, Mass. This refinery is operated by a subsidiary, Colonial Beacon Oil Co.

## W.P.R.A. Meeting August 8

Continuing its policy of bringing to refiners information regarding important trends and developments in the technological field, the Western Petroleum Refiners Association will hold a technical meeting August 8 at the Washington-Youree Hotel in Shreveport, La. The guest speaker will be E. F. Fellows, district manager of the National Aluminate Corp., Houston, Tex., and his subject will be "Use of Organic Materials in the Treatment of Boiler Feedwater." Starting time of the meeting will be 4 p.m.

## Permits Granted for New McColl-Frontenac Refinery

CALGARY, Alta.—McColl-Frontenac Oil Co. has been granted a permit for construction of buildings estimated to cost $275,000 to accommodate a $1,000,000 refining plant. The plant will be erected on a 60-acre site in the Bonnybrook district of East Calgary, and will have a capacity of 3,500 bbl. daily with 75 to 100 employes.

The company has obtained permission of the dominion fuel controller and the priorities board to proceed with the work and construction will start as soon as materials are available.

The McColl-Frontenac Oil Co. has large eastern Canada plants at Montreal and Toronto and is affiliated with the Texas Corp., whose selling organization in the Canadian West it took over a couple of years ago. The refinery will specialize in production of aviation gasoline for the commonwealth air-training plan.

# Natural Gas

## Panhandle Eastern Orders Pipe For Michigan Expansion Program

MILWAUKEE.—A. O. Smith Corp. has received a contract from the Panhandle-Eastern Co. and the Michigan Transmission Co. for 405 miles of pipe to bring natural gas from a point near Toledo, Ohio, to 66 Michigan cities. The contract, which calls for $4,633,000 worth of pipe from 26-in. on the loop line to the smallest size, 12¾-in., for lateral lines, will take 55,000 tons of steel. Priority has been obtained, it was stated, on the urgency of Michigan companies handling important defense orders for more fuel.

## Cabot Sells Section of Rochester, N. Y., Line

ROCHESTER, N. Y.—A section of the Godfrey L. Cabot, Inc., natural-gas line in Monroe County has been sold to Rochester Gas & Electric Corp. for $100,000, according to Herman Russell, president of the Rochester firm. The sale is subject to approval by the Public Service Commission.

George Cash, general superintendent of the Cabot organization, said the remainder of line will be retained at least for the present. The line is used to transport natural gas from the New York and Pennsylvania fields to Rochester.

A hearing on the sale has been set by the PSC at Albany, N. Y., August 7, at 2 p.m.

## Arkansas-Louisiana Gas System Being Extended

The Arkansas-Louisiana Gas Co. is building an addition to its Arkansas distributing system to serve the new $10,000,000 ammonium picrate plant which will be constructed by the Cities Service Defense Corp. at Marche, Ark. The line will be laid around Little Rock to connect with the company's line from Clarksville, and will serve the new defense plant north of Little Rock and assure added and uninterrupted service for Camp Robinson at Little Rock.

## Natural Gas Pipeline Co. Completes New Financing

Natural Gas Pipeline Co. of America completed negotiations for new financing, part of which would be used for construction of 400 miles of 26-in. loop lines to increase transmission capacity of the company's pipe line from Texas to Chicago.

The financing was understood to involve sale of $22,500,000 of 3¼ per cent bonds to the Metropolitan Life Insurance Co. and Equitable Life Assurance Society and a 5-year bank loan for $7,500,000 that would carry a rate of 1.83 per cent. Most of the proceeds from the bond issue would be used to construct the pipe line.

The remaining proceeds would, it was understood, be used partly to retire outstanding 6 per cent bonds.

# Recycling News

## Commission Hears Plea For Chapel Hill Plant

AUSTIN, Tex.—Testimony in support of application for a permit to build a recycling plant in the Chapel Hill area of Smith County, Texas, was presented before the Railroad Commission here August 6 by engineers of Shell Oil Co. Inc., and associates in the project.

Sun Oil Co., Sinclair Prairie Oil Co. and Hunt Oil Co. will be associated in the Chapel Hill project which will be operated by Shell. This group probably will be joined by other operators in the field all of whom have been invited to participate.

Present plans call for a plant of sufficient capacity to process up to approximately 35,000,000 cu. ft. of gas daily. The condensate yield, on the basis of present plans, would be approximately 2,000 bbl. daily. The gas to be recycled is from the Paluxy formation and will be returned to that formation after passing through the plant for separation of the condensate.

The application of recycling, coupled with unitization of producing operations, will be a major contribution to the conservation of natural resources in the Chapel Hill field, engineers told the commission.

# Natural Gasoline

## Rates of Production Up; Stocks in Slight Drop

Daily average production of 1,597,000 gal. of natural gasoline from 88 operating plants in California was reported for June, an increase over 1,584,400 gal. daily in May.

Stocks of natural gasoline declined from 1,778,761 gal. at the end of May to 1,715,192 gal. June 30.

Production of liquefied petroleum gas totaled 5,891,000 gal. in June compared to 6,135,513 gal. in May. Despite the 1-day abbreviation of June operations compared with May, natural-gasoline production increased in the more recent month in the Belridge field, San Joaquin Valley, and the Dominguez field, Los Angeles Basin area, as well as in the plants listed as miscellaneous in both those districts.

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# Oil Companies Win Verdict In Wilson Strickland Case

CONROE, Tex., Aug. 7.—Verdict in favor of Humble Oil & Refining Co. and six other defendant oil companies and operators in the long-tried, famous Wilson Strickland case, involving title to valuable oil lands in the heart of the Conroe field, was returned in district court here August 2. Judge E. T. Murphy sat through the trial which has been under way continuously since August 26, 1940. Attorneys for some of the numerous plaintiffs indicated that appeals will be taken.

Defendants in addition to Humble Oil & Refining Co. were Mon-Sho Co., Showers-Moncrief Co., Alexander Deussen, E. A. Showers, W. A. Moncrief and T. E. McEaschen. The case embraced a total of 47 different suits with more than 5,000 individual plaintiffs, all claiming to be heirs of Wilson Strickland, original owner of the land, and seeking a share in the properties. More than 25 different "Wilson Stricklands" were injected into the case as being the bona fide original owner.

The State of Texas also stepped into the case with the contention that title to the land involved had reverted to the commonwealth and that the land was public property.

The original suit in the case, which was styled John Vince versus Humble Oil & Refining Co. et al, was filed about 8 years ago, and at that time involved 1,469 acres of land and about 30 defendant companies and operators. John Vince, now 92 years old and living in Louisiana, claimed that some of his forefathers gained title to the land through a judgment against Wilson Strickland, the owner, who had come to Texas about 1838 or 1840 and settled on the land.

Later, Wilson Strickland disappeared, and therein, rested one of the main complications in the case. Heirs of Wilson Strickland claimed the Vince judgment was void on the grounds that Mr. Strickland never was served personally with notice of the judgment. The decision of the jury in the case upheld these claims and rejected the claims of the Vince family.

Most of the Wilson Stricklands and their respective heirs have been brought into the case by intervention since the original suit was filed. Of particular interest, however, in the case is the fact that heirs of 16 of the Wilson Stricklands named brought evidence into court to show their "Wilson Strickland" to be the bona fide original owner of the land.

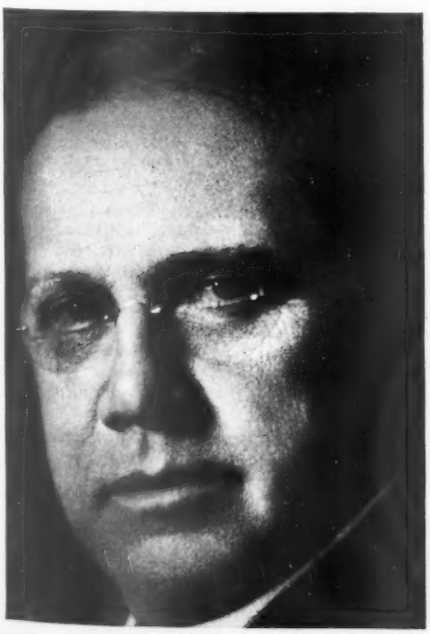
When the trial opened, the case involved only 500 of the original 1,469 acres listed in the suit Claims to the remaining 969 acres were severed to be tried separately. Since the trial started, ownership to 240 acres of the 500 acres has been settled from time to time by instructed verdicts, leaving 260 acres involved in the present verdict.

## Blaffer, Humble Chairman, Retires From Active Service

Robert Lee Blaffer, chairman of the board and treasurer of Humble Oil & Refining Co., retired from active service this week, one day before his sixty-first birthday. Mr. Blaffer started his oil career at Spindletop in 1901, in partnership with W. S. Farish, now head of Standard Oil Co. (New Jersey). The two men became part of Humble when the firm was organized in 1917. Mr. Blaffer was made treasurer in that year, was elevated to the presidency in 1933, and in 1937 was elected chairman of the board.

He has long been active in civic affairs in Houston. In 1935 he was made a member of the board of trustees of Rice Institute. He has also interested himself in the various war-relief programs and last spring was appointed area coordinator for the Office of Production Management of the United States Government.

James Anderson, vice president, has been named to succeed Mr. Blaffer as treasurer.



*R. L. BLAFFER*

## Forty-five Tankers Included In Second Lot Transferred

NEW YORK, Aug. 5.—Oil rationing in the East this fall and winter has been made imperative by the second transfer of tankers to British shuttle service. Forty-five tankers, 30 United States flag boats and 15 Norwegian vessels are included in the second transfer. They will raise the total withdrawn from Western Hemisphere service to approximately 850,000 tons. Indications were that alternatives which the industry had adopted would just about enable it to offset the loss of the first 50 tankers. This possibility has been definitely removed by the scheduled transfer of the 45 and, as a result, a 10 to 15 per cent shortage in tanker-borne supplies is envisioned for the last quarter of this year and for the first quarter of next.

This shortage will not be limited to the East Coast of the United States but will be experienced by all districts in the Western Hemisphere which are supplied oil by tankers. All tankers in the hemisphere are being operated as a single fleet to promote the highest possible efficiency and to prorate the shortage. Its effect elsewhere is noted in the report of rationing in Brazil and in the fact that Puerto Rico is now being supplied from Aruba and Curacao instead of from the Gulf Coast even though this requires the payment of an import tax. Puerto Rico is normally supplied principally by American oil companies. Oil is being taken from Aruba and Curacao instead of the Gulf because the tanker voyage from the former entails but 2 days in contrast to 4 for the latter.

## Geologists Select Denver as 1942 Convention City

The twenty-seventh annual meeting of the American Association of Petroleum Geologists will be held at the Cosmopolitan Hotel, Denver, Colo., April 21-24, 1942, according to a recent announcement from the association.

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# Coordination Meeting Will End Period of Uncertainty

*(Continued from Page 11)*

Pacific Coast and that operations in this territory are normal and, therefore, present no special problems that require attention.

## Transportation and Statistics Hold District 5 Attention

LOS ANGELES, Calif. — Statistical data on all branches of the Pacific Coast petroleum industry have been assembled and prepared for submission to the coordinator's office in Washington, D. C. Committees under the direction of A. L. Weil, chairman of District 5, have each held an average of two meetings.

Organization of personnel to carry out details of the petroleum coordination work has been deferred pending more explicit instructions from Coordinator Ickes.

The District 5 production committee, headed by E. E. Pyles, vice president of Hancock Oil Co., Long Beach, Calif., is expected to recommend that the California Conservation Committee be charged with administration of curtailment matters. The Conservation Committee is now directing the voluntary curtailment program and has records and personnel for this phase of the work. A state conservation law is apparently out of the question for at least 2 years while the legislature is in recess.

Problems similar to those on the East Coast but of a less acute nature have engaged attention of the District 5 transportation committee. The general committee has studied possibilities of eliminating cross hauls.

The functional transportation group has considered the possible use by the entire industry of Shell Oil Co., Inc., and Tide Water Associated Oil Co. pipe lines from the San Joaquin Valley fields to the San Francisco Bay region. This step would eliminate some of the previous need for coastwise tankers.

Consideration also has been given to use of one of the 20-in. natural-gas lines extending from Kettleman Hills to Oakland and San Francisco.

Shell is about ready to start work on its new pipe line from Ventura Avenue to the Wilmington refinery in the Los Angeles district. The line may also accommodate Tide Water's production and thus eliminate tankers now used in moving this oil.

Transfer of 10 additional tankers from Pacific Coast service is under consideration and for this reason transportation has received first consideration in District 5.

# PROGRAMS AND MEETINGS

## American Chemical Society Will Have Defense as Convention Theme

Mirroring present trends in oil refining, and indicating the close relationship of the oil industry to national-defense effort, more than 20 research reports will be presented at the 102d meeting of the American Chemical Society at Atlantic City, N. J., September 8 to 12.

Dr. J. K. Roberts, Standard Oil Co. of Indiana, has announced that chemists from the nation's leading petroleum laboratories will participate in the society's Petroleum Division. Dr. Roberts is chairman of the division.

Two of the papers deal with the determination of aniline point, which measures the aromatic content of naphthas. These papers are said to give a glimpse of one aspect of the very valuable work which has been done in recent years on the production of these materials from petroleum. The authors are B. H. Shoemaker and J. A. Bolt, Standard Oil Co. of Indiana, and Bruce B. Carr and M. S. Agruss, of Pure Oil Co., Chicago.

A group from the Texas Co., Beacon, N. Y., consisting of Harry Levin, F. P. Farrell and A. J. Millendorf, will present a paper on the "Determination of Phosphorus in Lubricating Oil." This research is indicative of the volume of work done by oil companies in recent years on the improvement of automobile-engine lubricating oils by the use of small amounts of additives of the most varied nature. Other papers will describe ingenious laboratory equipment for duplicating engine conditions, so that new oils or new additives may be tested without the necessity for using a fleet of cars.

"Another trend in petroleum refining is illustrated by papers on the composition of crude oil and of cracked gasoline," the announcement says. "Whereas formerly the petroleum technologist regarded his raw material and products as a mysterious mixture and dealt with them altogether by trial and error, today he is acquiring more and more information regarding the hydrocarbons present, and is also coming more and more to regard each hydrocarbon as an individual with its own peculiarities."

Research in alkylation, a commercial process important in producing the large volume of high-octane aviation gasoline required by the Army and Navy, will also be reported.

## Appalachian Meter School Scheduled August 18, 19, 20

A. F. Kraus, superintendent of gas measurement of the Peoples Natural Gas Co. of Pittsburgh, Pa., in his capacity as chairman, has extended an invitation to all in the gas and oil business and to those in other industries interested in measurement and regulation to attend the Appalachian Gas Measurement Short Course at West Virginia University, at Morgantown, W. Va., on August 18, 19 and 20.

Aim of the schooi is to present, discuss and illustrate the various problems in measurement and control of gas so that each person attending may gain practical knowledge which will help in the performance of his tasks.

General meetings will be held each morning when those present will hear recognized authorities speak on various economic aspects of gas measurement and regulation. Those speakers include Dr. C. E. Lawall, president of West Virginia University; C. C. Reed, Hope Natural Gas Co.; Dr. Reginald L. Wakeman, Mellon Institute of Industrial Research; Dr. R. C. Colwell, physics department, West Virginia University; Judge E. B. Pennybacker, chairman Public Service Commission of West Virginia; William A. Ehlers, Reynolds Gas Regulator Co.; T. H. Kerr, the Ohio Fuel Gas Co.; A. D. MacLean, Pittsburgh Equitable Meter Co.; D. P. Hartson, Pittsburgh & West Virginia Gas Co.; E. H. Poe, secretary, Natural Gas Section of the American Gas Association; and A. F. Benson, American Meter Co.

## To Celebrate Second Anniversary Of Tinsley Field in Yazoo City

A program embracing entertainment for all ages is being planned by the committee in charge of arrangements for the Mississippi Oil Exposition, which will be held in Yazoo City August 27-29. Exhibits will be housed in a spacious indoor building in the heart of the city.

The Tinsley field now boasts of 223 producing wells with a daily potential in excess of 20,000 bbl.

●

## Oil Industry Priorities In Hands of Coordinator

WASHINGTON, D. C., Aug. 5.—Office of Production Management is working out a division of jurisdiction with petroleum coordinator's office. Control over priorities of metals and other materials for all branches of the oil industry has already been transferred to the coordinator where it is being handled by Robert Allen in addition to duties as head of production division.

Details of administration of priorities have not yet been worked out but the coordinator today obtained an A-1-A rating for steel for Portland-Montreal pipe line. This is highest regular rating obtainable, comparable to battleships and is intended to permit completion of the line before winter. The line formerly had A-2 rating.

# CALENDAR OF EVENTS

### August

AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS, Duluth, Minn., August 12-15.

NATIONAL STRIPPER WELL ASSOCIATION, Tulsa, October 20.

MISSISSIPPI OIL EXPOSITION, Yazoo City, Miss., August 25-30.

KANSAS GEOLOGICAL SOCIETY, fifteenth annual field conference, August 27-31.

MISSISSIPPI OIL EXPOSITION, Yazoo City, Miss., August 27-29.

CALIFORNIA NATURAL GASOLINE ASSOCIATION, Los Angeles, Calif., October 31

### September

AMERICAN CHEMICAL SOCIETY, Atlantic City, N. J., September 8-12.

PACIFIC COAST GAS ASSOCIATION, annual convention, Del Monte, Calif., September 10-13.

NATIONAL PETROLEUM ASSOCIATION, thirty-ninth annual meeting, Hotel Traymore, Atlantic City, N. J., September 17-19.

SOCIETY OF AUTOMOTIVE ENGINEERS, national tractor meeting, Schroeder Hotel, Milwaukee, Wis., September 25-26.

NATIONAL LUBRICATING GREASE INSTITUTE, ninth annual meeting, Stevens Hotel, Chicago, September 29-30.

### October

WEST VIRGINIA OIL AND NATURAL GAS ASSOCIATION, annual convention, Clarksburg, W. Va., October 2-3.

NATIONAL FOREIGN TRADE CONVENTION, twenty-eighth meeting, Hotel Pennsylvania, New York City, October 6-8.

NATIONAL SAFETY CONGRESS, Stevens Hotel, Chicago, October 6-9.

TEXAS MID-CONTINENT OIL AND GAS ASSOCIATION, twenty-second annual convention, Beaumont, Tex., October 9-11.

AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS, Pacific section, Los Angeles, Calif., October 16-17.

AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS, Petroleum Division, Dallas, Tex., October 16-18.

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA, twelfth annual meeting, Tulsa, October 20-21-22.

SOCIETY OF AUTOMTIVE ENGINEERS, national fuels and lubricants meeting, Mayo Hotel, Tulsa, October 23-24.

CALIFORNIA NATURAL GASOLINE ASSOCIATION, Los Angeles, Calif., October 31.

AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS, Southern California Section, Los Angeles, Calif., October 30-31.

SOCIETY OF AUTOMOTIVE ENGINEERS, national aircraft production meeting, Biltmore Hotel, Los Angeles, Calif., October 30-November 1.

### November

AMERICAN PETROLEUM INSTITUTE, twenty-second annual meeting, St. Francis and Palace Hotels, San Francisco, Calif., November 3-7.

SOCIETY OF AUTOMOTIVE ENGINEERS, West Coast transportation and maintenance meeting, San Francisco, Calif., November 5-6.

SOCIETY OF AUTOMOTIVE ENGINEERS, national transportation and maintenance meeting, Statler Hotel, Cleveland, Ohio, November 13-14.

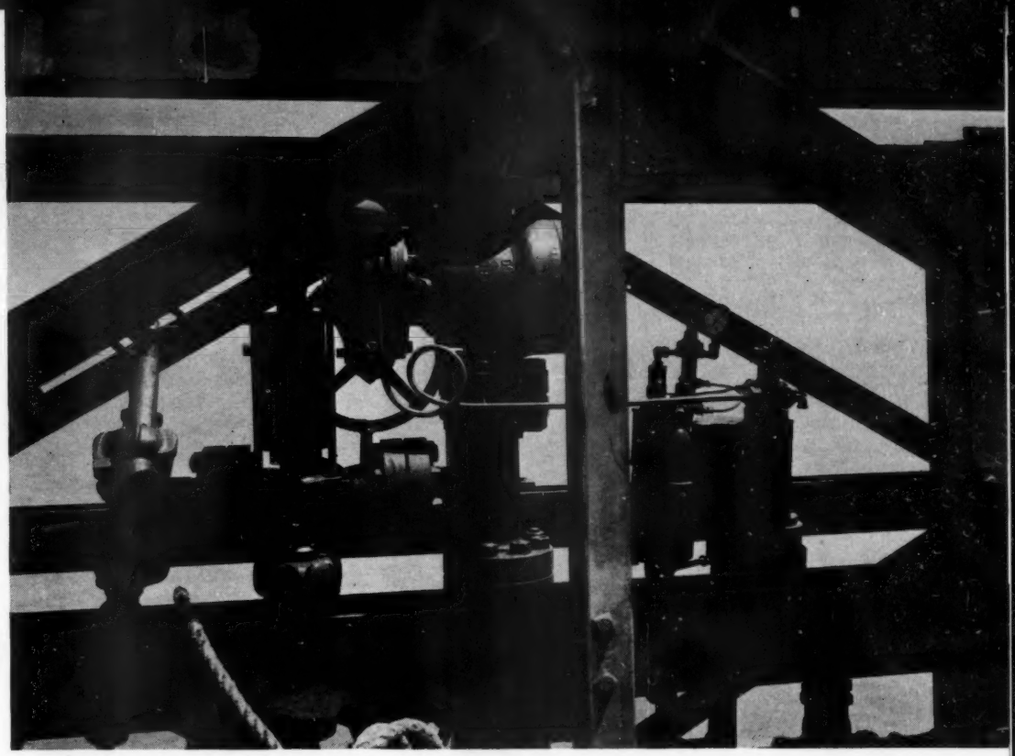
### December

EXPOSITION OF CHEMICAL INDUSTRIES, eighth annual meeting, Grand Central Palace, New York, December 1-6.

NEW MEXICO OIL AND GAS ASSOCIATION, Artesia, N. M., December 3.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS, Southeastern district meeting, New Orleans, La., December 3-5.

OKLAHOMA STRIPPER WELL ASSOCIATION, Tulsa, December 5.



*Storms in the shallow water around oil wells often develop considerable fury and can do extensive damage to the control connections. Picture shows a hook-up on a well at Red Fish Reef in Galveston Bay which automatically shuts the valves in case a line breaks or there is any damage to the equipment. The valve at left is held open by the diaphragm above which is operated by gas pressure; pilot controls are at the right. The steel structure around the well head prevents damage from floating objects*

# ENGINEERING & OPERATION

## In This Section

AUGUST 7, 1941


**CONTINENTAL ADDS FOUR DIFFERENT TYPES OF SOLVENT UNITS**

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Continental Oil Co. has installed four different solvent units for treating and dewaxing oil as part of its refinery-expansion program. These units are known as the furfural, Duo-sol, M. E. K. and the Bari-Sol plants. While each is of conventional design, the combined use of the four is a new step in refinery processing.

**MECHANICAL INNOVATIONS AID IN BUILDING NEW ENGLAND LINE**

By Paul Reed ..... Page 32

Construction of the Portland, Me., to Montreal, Que., crude oil line has made necessary the revision of pipe-line building practices to overcome the difficulties caused by mountainous, wooded country along the route. Improvements and innovations adopted will affect the methods used on future lines.

**REDUCING HAZARDS IN HANDLING WIRE ROPE**

By F. L. Spangler, M.E. ..... Page 34

Wire ropes seldom fail under load but there is another danger present when working with drilling and other lines. Injuries caused by improper handling and failure to take the necessary precautions result in many lost-time accidents which could have been avoided.

**REPRESSURE PLANTS PERMIT OIL PRODUCTION IN OTIS, KANSAS**

By Harry F. Simons ..... Page 39

The Otis field produces mostly gas but there is also a combination zone present where both oil and gas are produced. State regulations prevent the waste of gas while producing oil and operators are installing small repressure plants for recycling.

**METALS IN REFINING**—By W. L. Nelson ..... Page 43

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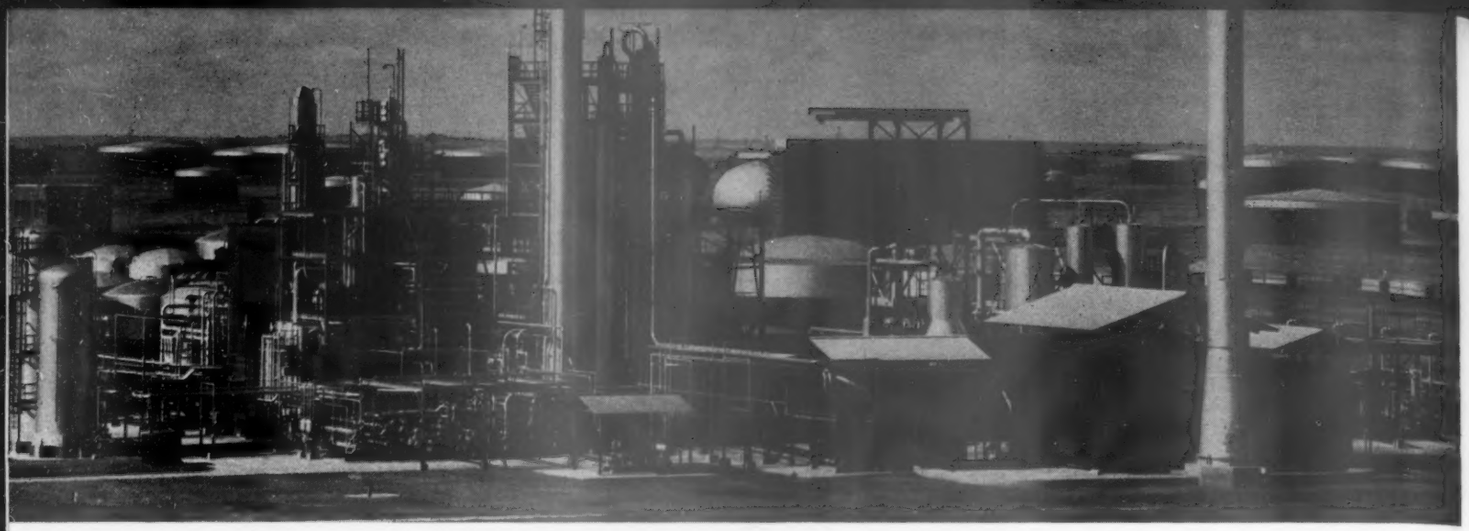


*General view of Continental Oil Co.'s new solvent refining and dewaxing plant at Ponca City, Okla., refinery*

# Continental Adds Four Types Units to Separate, Dewax Lube

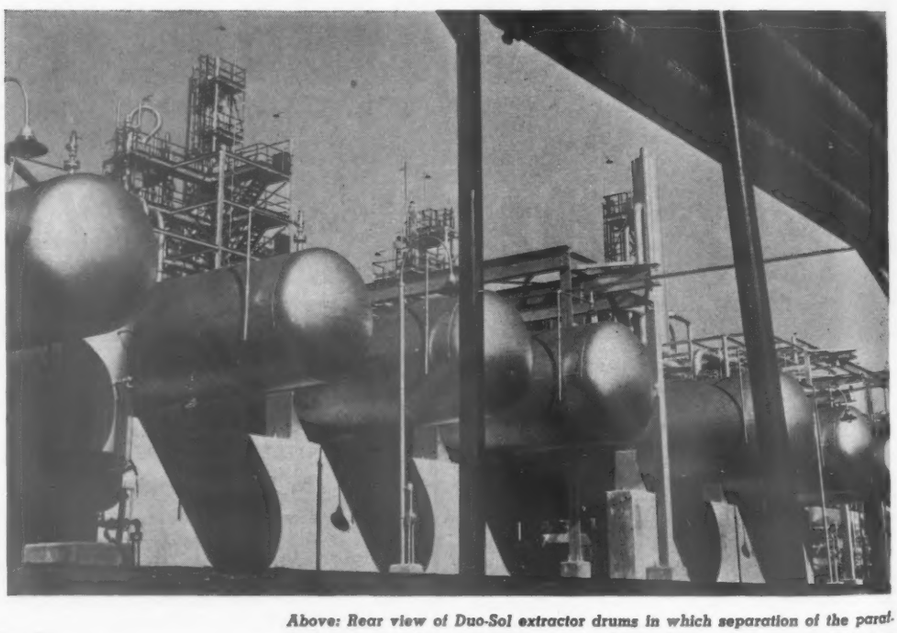
By W. T. ZIEGENHAIN

REPRESENTING an important part of the Continental Oil Co.'s refinery-expansion program at its Ponca City, Okla., plant, four distinctly different types of solvent units were recently placed in full-scale operation there. These include two for treating the oil and two for dewaxing it. They are referred to as the furfural, Duo-Sol, M.E.K. and Bari-Sol plants.

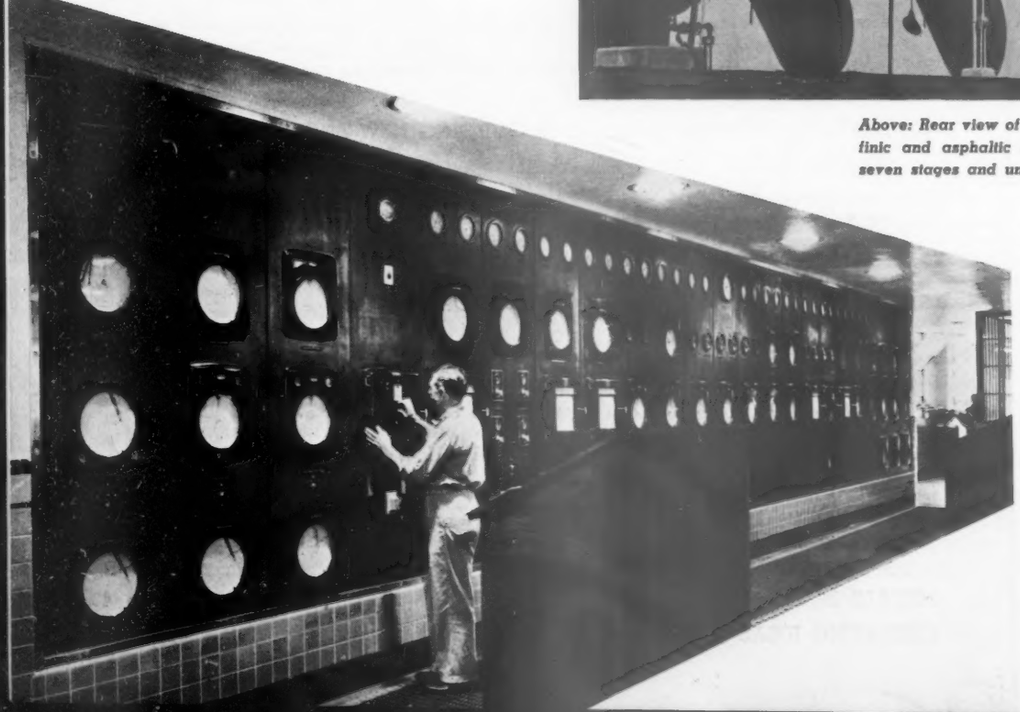
In each case the operation of the individual process is conventional but the combined operation of all four is unique. The choice of processes was made to best fit Continental's diversified needs. To accomplish this the inherent advantages of each process was recognized, yet sufficient flexibility was retained to allow for changes in market demands among the various grades of lubricants made.

An important adjunct to these processes is the use of addition agents. In the highest quality oils a small percentage of methyl dichlor stearate is added to reduce the surface tension of the lubricant and thereby improve its oiliness. Also, a small quantity of "thialkene" is added. This is a sulfonated olefin made at the Ponca City refinery and substantially reduces the oxidation or sludge-forming characteristics of the lubricant.

Because of all these improvements in processing methods and because the use of these extra additives, the company's new line of top-grade



*Above: Rear view of Duo-Sol extractor drums in which separation of the paraffinic and asphaltic components of the lubricating stock is accomplished in seven stages and under a pressure of 300 lb. per sq. in.*



*The faces of more than 100 instruments meet the eye as a visitor enters the control room serving the four new solvent-refining and dewaxing units in the Continental plant*

*Operator of rotary filter watching wax film as it is being washed*

of processing has been chosen, the oil is run through in the same manner as the lighter wax distillates. The resulting dewaxed raffinate is then usually reduced to produce an S.A.E. 30-grade motor oil.

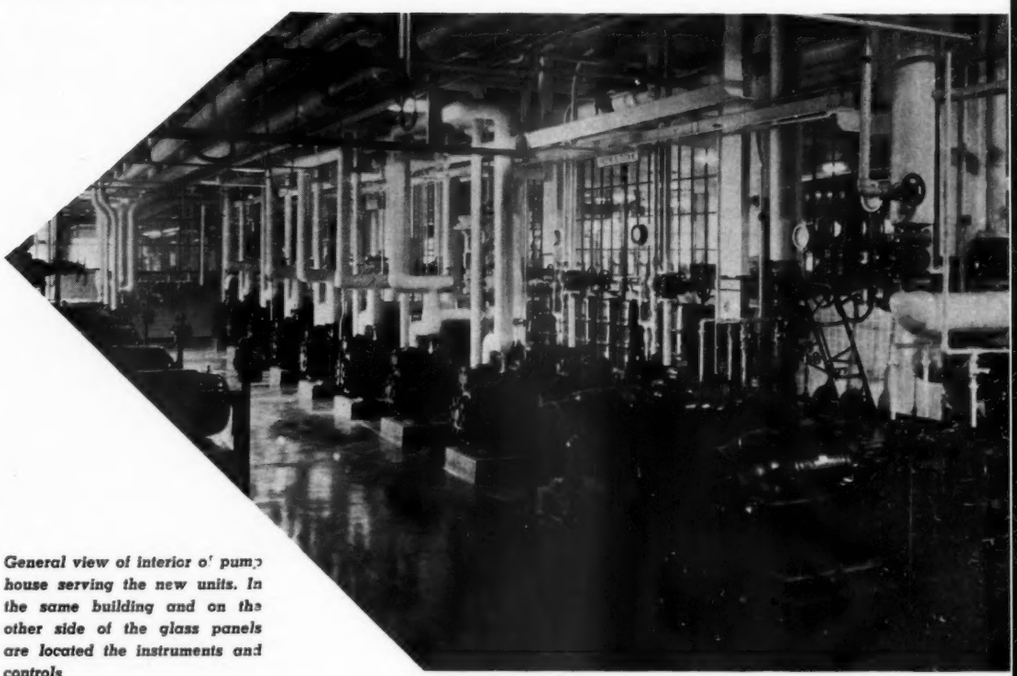
The Bari-Sol equipment mentioned earlier is used primarily to dewax residue oils in the manufacture of very heavy pale-lube stocks. One of the principal products of this process is a zero cold-test oil of 160 viscosity at 210° F. As the residuum oil is received at the Bari-Sol plant it has a viscosity of about 350 at 210° F. It is mixed with ethylene dichloride and benzene and chilled to minus 20° F. At this temperature the wax remains as a solid in the crystal form and the oil dissolves in the ethylene dichloride and benzene solution.

The solvent mixture is heavier than the wax

*(Continued on Page 48)*

# Of Solvent

# Oil Stocks



*General view of interior of pump house serving the new units. In the same building and on the other side of the glass panels are located the instruments and controls*

motor oils has been named "Nth," to infer this oil represents quality to the "Nth" degree.

### Treating Plants

Briefly recognizing the function of each unit in the group, greatest attention is directed to the treaters, namely the furfural and Duo-Sol plants.

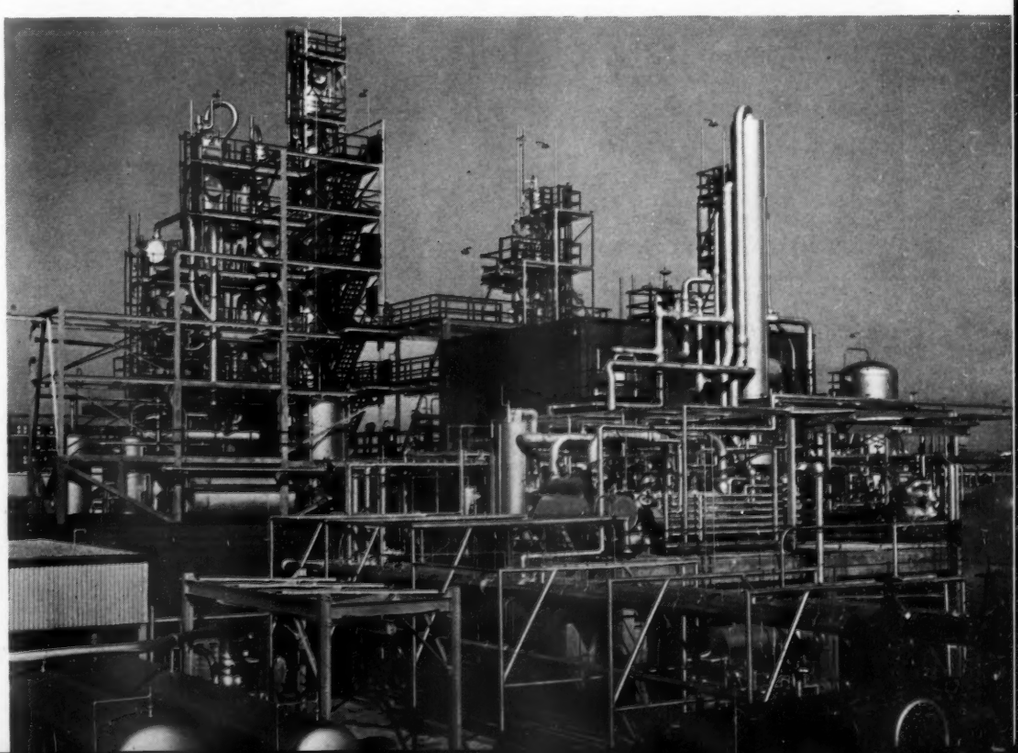
The furfural (alpha furfuraldehyde) plant receives as charging stock all of the light wax distillate. Approximately 1,200 bbl. of this is available daily. It has a S.U. viscosity of 75 to 80 at 100° F. and after solvent treatment, is rerun to make a 180-viscosity motor-oil base. The raffinate or paraffinic portion of the processed stock is freed of the solvent and then sent to the M.E.K., or methyl-ethyl-ketone, plant for dewaxing. The asphaltic portion is cracked after being freed of the furfural solvent.

The Duo-Sol unit receives daily about 1,600 bbl. of heavy vacuum-distilled lube bottoms and in the conventional manner this material is contacted with liquid propane and "Selecto," the latter a blend of phenol and cresol. Contacting and separation is accomplished in this plant through seven horizontal drums; the separation of the paraffinic and the asphaltic parts becoming increasingly apparent as the mixture progresses through the seven stages. The entire system is maintained under a pressure of 300 lb. per sq. in. in order to hold the propane as a liquid. This is necessary and is an important step in the process since the liquid propane has the property of dissolving out the paraffinic hydrocarbons while the Selecto dissolves the asphaltic portion. The propane and Selecto are themselves immiscible.

As in the case of the furfural raffinate, the propane extract solution is processed to recover the solvent while the oil raffinate is pumped to the M.E.K. plant to be dewaxed. The asphaltic fractions recovered from the Duo-Sol plant are cracked as in the case of the furfural extract.

In addition to the regular production of wax distillates mentioned, the refinery produces daily about 550 bbl. of a heavy overhead cut of oil of 500 viscosity at 100° F. This is segregated and may be processed through either the furfural or the Duo-Sol unit. After one or the other method

*General view of new solvent-refining and dewaxing units showing contacting and exchanger equipment*



# Mechanical Innovations Aid in Building New England Line

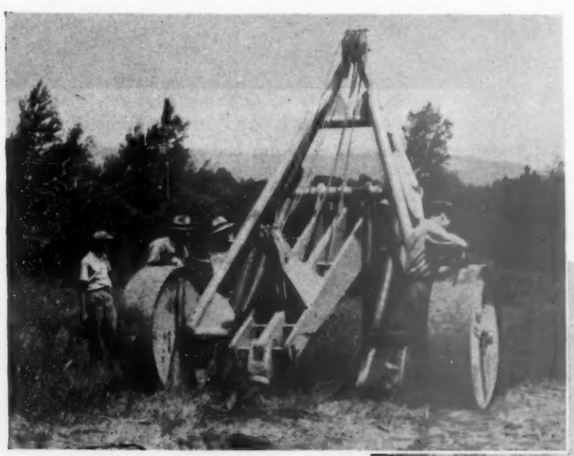
By PAUL REED

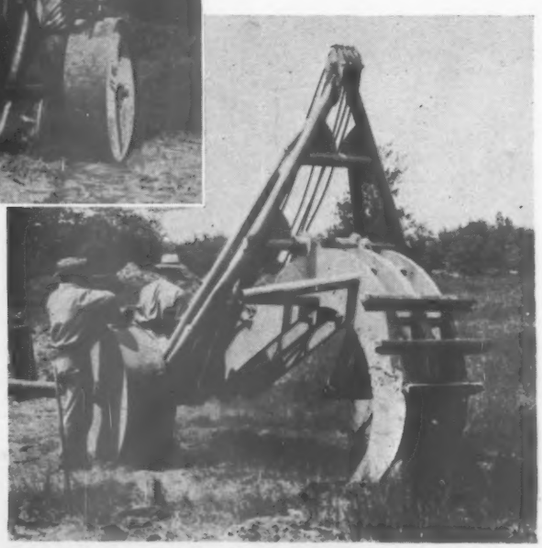
IN laying the 236-mile, 12¾-in. crude-oil trunk line from Portland, Me., to Montreal, Que., the construction organizations engaged in this work are applying practices which are adapted to the requirements of this unusual undertaking. Improvements and innovations can be observed which contribute to progress of pipe-line methods. A general description of the project appeared in The Oil and Gas Journal, July 24, Page 12.

Formal ceremonies were held August 1 to celebrate the joining of the American and Canadian ends of the line at the international boundary. The guests included representatives of the Canadian and United States governments, the Province of Quebec and the New England states through which the line passes. This project has made the most progress of any that have been planned to meet the emergency resulting from transfer of tankers to British service. Approximately 50 miles of pipe has been completed. This line has the distinction of being the only single major pipe line to transport oil between two important seaports. After crossing the White Mountains, the line reaches its highest point in the Green Mountains of Vermont at an elevation of 1,950 ft. above sea level. This project, which will cost about $8,000,000 to provide a pipe line and eight pumping stations to move between 50,000 and 60,000 bbl. of South American and Gulf Coast crudes, belongs to Montreal Pipe Line Co., Ltd., on the Canadian side and to the Portland Pipe Line Co. in the United States. Both of these companies are subsidiaries of Standard Oil Co. of New Jersey.

The first shipments of pipe for Portland Pipe Line Co.'s section of the new pipe line arrived at the end of June for the beginning of construction which started near Gorham, N. H. Previous to this, Oklahoma Contracting Co. had dug ditch along the right-of-way southeast and Williams Brothers Corp. had dug ditch northwest. In this rough, mountainous, wooded country, timber is cleared by a gang working ahead of the angle-dozer which moves the large boulders, common in this terrain, in order to provide level ground for trucks and tractors to pass over. This is about as serviceable as a secondary country dirt road. The pipe is being laid bare with the exception of about 1 per cent which will be coated. Coated sections include 5½ miles near the South Portland terminal and the river crossings as well as the sections which cross peat bogs in Canada, congested areas and tidal rivers. Where the pipe is coated, it is cleaned with brushes and reprimed before application of Ennjay enamel and wrapped with asbestos felt.

*Laying pipe in the notches of the White Mountains for the Portland-Montreal crude-oil lines. Most of the construction work on the Portland-Montreal crude-oil pipe line is concentrated now in mountainous sections where the ground is rough, wooded, and full of large boulders and where grades are frequently very steep through the notches.*





*Front view of rock rooter, above, showing the end towed by tractor and means provided for raising and lowering three-pronged part which raises boulders to the surface. This equipment has been developed by Williams Brothers Corp. Rear view, right, showing crossbars against which the bulldozer pushes in following the rock rooter*

The pipe is being shipped in monthly allotments coming in deliveries which are not expected to exceed 1¾ miles per day which must be divided between the two contractors working in the United States. The contract has been let in three sections. Williams Brothers Corp. has 72 miles between Montreal and Newport, Vt., and 83 miles between Newport, Vt., and Gorham, N. H. Oklahoma Contracting Co. has 80 miles from Gorham, N. H., to Portland. For the construction of the sections in the United States, both contractors are committed to have two gangs on each section if conditions require.

Early this month, Williams Brothers Corp. brought a new gang to the job which is laying pipe for the Canadian end of the line, starting at Newport, Vt., and going toward Montreal. Arrangements have been made to furnish about 1 mile per day for this gang in addition to the shipments which have been planned for the United States section.

Because of the roughness of the terrain and the small amount of pipe available, the work of each

gang is unlikely to exceed a mile a day. Under these conditions, clearing the right-of-way and ditching are matters of more concern than fast welding. It appears that considerable blasting will be required.

Williams Brothers Corp. has a program which calls for a welding crew in the Gorham gang consisting of two tack welders, seven bell-hole welders and a utility welder. The gang working south from Newport, Vt., has a welding crew with one tack welder, four or five bell-hole welders and a utility welder.

Construction organizations have developed special methods and equipment to meet the conditions of the job.

### New Type of Rooter

The oustanding innovation is the use of a three-pronged rooter which has been designed by Williams Brothers Corp., and fabricated in this company's shop. This is called a "rock rooter" so that it will not be confused with the Le Tourneau one-pronged rooter which was originally built for road work. The Le Tourneau rooter was first introduced into pipe laying by Williams Brothers during construction of Utah Oil & Refining Co.'s line from Fort Laramie, Wyo., to Salt Lake City, Utah, 2 years ago.

Although at first the three-pronged rock rooter appears to bear a certain resemblance in general outline to the one-pronged rooter, a close attention to details shows that the three-pronged rock rooter has been specially designed for a part in the digging of ditch for which no equipment has been available before.

The common practice in digging ditch for pipe lines is to excavate with ditching machines and back hoes. Where hard rock is encountered blasting is necessary. On this project Williams Brothers is departing from general practice by using this procedure: Following the angledozer which clears the right-of-way comes a Le Tourneau one-pronged rooter. After this comes the Williams Brothers three-pronged rooter, just mentioned. The one-pronged rooter breaks the ground. The three-pronged rooter's main feature is the three-pronged hook which is adjusted so that it reaches down to the depth desired for the ditch. The three prongs are set so that they tear up the ground for the width of the ditch. Three crossbars welded across the prongs are in contact with the bulldozer which follows and pushes the rock rooter. The three-pronged rooter raises to the surface all the boulders with which it comes in contact in the ground. The rock rooter on the Portland-Montreal line has reduced the use of explosives and drilling considerably.

*Section of right-of-way with ditch dug by Oklahoma Contracting Co. near Gorham, N. H.*

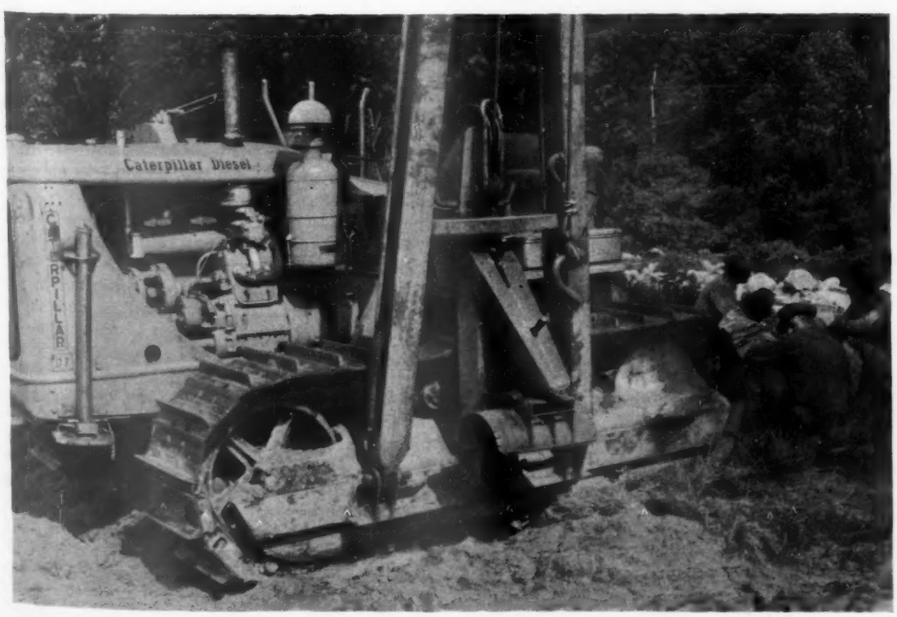
Raising and lowering the three-pronged hook is done by a wire line running over three sets of sheaves to a winch on the tractor which tows the rock rooter. Rigidity of construction is increased by special double-tube A-frame. There are V-shaped extensions of pipe welded to the upper part of the three-pronged hook. Wide-rimmed wheels have been furnished.

This three-pronged rooter known as the rock rooter has been developed by executives of Williams Brothers as a result of their experience in laying pipe lines through rough country in Canada and the United States.

The ditcher follows the rock rooter. Boulders too large for the rock rooter to move are either blasted or removed. Boulders twice the size of an automobile are moved from the ditch by angledozers. The last work in excavating the ditch is done by the back hoe.

In the laying of the southern section of the Portland-Montreal line, Oklahoma Contracting Co. is utilizing a special type of bending shoe adapted for the requirements of bending 12-in. pipe. Last summer during the construction of a 6-in. gasoline line, a bending shoe proved to be successful which was held to the side of a tractor by a pin which allowed it to swing when the pipe was pressed against it. The type of shoe adopted by Oklahoma Contracting Co. for work in the White Mountains is supported by a steel strap which fits over a shaft which permits the shoe to swing. The shaft is held in the steel framework built at the side of the tractor to hold the bending shoe. Small slots have been cut by a saw at both ends of the shoe to provide elasticity. A shoe of this kind makes it possible to bend pipe without the use of a belt. The shoe has been braced by a modern type of reinforcement which furnishes rigidity with light-weight construction.

*Bending shoe, specially made for requirements of bending 12-in. pipe, installed on tractor of Oklahoma Contracting Co.*




## Questions and Answers

**Do oil-well swabs stick and when stuck does the swab stay in one place or does the load of oil force it back down the hole? Can the load be dumped? What is the procedure for getting the swab out of the hole once it has been stuck? Where can I get descriptive literature on swabs?—S. E. M., Las Cruces, N. M.**

Swabs do occasionally stick while coming out of the hole with a load due to a variety of causes, among which is sanding up. Ordinarily the swab stays where it is until it is dislodged. The load of oil has a tendency to shove the swab back down the hole but not enough to loosen it.

Practically all of the contractors now use a sinker bar and a set of jars with the swab so that it can be jarred loose in case it becomes stuck. Sometimes it is necessary to cut the swab line and run a fishing string to recover the swab.

If it is impossible to loosen the swab it is generally drilled up where it is or driven back to the bottom and drilled up. Fewer swabs are stuck now than formerly, as there is more care taken in running them. The practice of running the swab to the bottom and often beyond the end of the casing has been discontinued.

Some swabs dump the load when stuck and others do not. Actually, this makes very little difference as it would be a very simple matter to pull or jar loose from the swab and then either bail or swab the oil out of the hole.

The following is a list of manufacturers shown in the Buyers Guide section of the Producing Equipment Directory, from which you can obtain bulletins giving complete descriptions: Guiberson Corp., Dallas, Tex.; Mission Manufacturing Co., Houston, Tex.; Shull Perforating Co., Long Beach, Calif.; Parkersburg Machine Co., Long Beach, Calif.; Kibele Manufacturing Co., Dallas, Tex.; Saunders Brothers, Whittier, Calif.; Shaffer Tool Works, Brea, Calif.

# Reducing Hazards in Handling Wire Rope

F. L. SPANGLER, M.E.
Member American Society of Safety Engineers

THE comparatively high strength of a good grade of wire rope, together with the fact that the condition of the rope is revealed at any time by a careful inspection and that wire rope almost always gives ample warning before parting when taxed beyond its strength, has developed a universal confidence in wire rope as a safe material for handling loads.

When considering the safeness of wire rope, however, there is an aspect that is too often overlooked, and that is the injury that can result to the man who does not use proper precautions when handling wire rope. These injuries are generally the result of any of three kinds of hazards: First, there is the danger of deep-seated puncture wounds or skin lacerations caused by the sharp ends of broken wires sticking out from worn ropes or by the exposed ends of the rope or of the wire ends in a spliced section. Then, there is the lashing or looping of an unmanageable rope, which can take off a man's limb or decapitate him if he is caught in its coils. As an example of the third type of injury, a man's glove may be caught by a broken wire or strand and his hand be pulled into a drum or sheave.

In an effort to determine the extent of injuries of these three types among oil companies, and the means being used to eliminate or reduce the number of injuries of this kind, questionnaires were mailed to a representative list of oil companies from which 15 replies were received. Twelve of the replies said that one or more of these hazards definitely exist and the remaining three companies said they did not believe that the handling of wire rope was dangerous, though two of these companies mentioned that their records showed injuries resulting from wickers in wire rope.

*Spooling and handling of wire rope is one of the principal danger points. Roustabout uses a short nipple of 2-in. pipe for guiding the line instead of hands. He also holds the pipe so it can readily slip out of his hands and not drag him into the reel*

Some of these reports gave details of specific instances of injuries. In one case, a wicker from a wire rope became imbedded in the right index finger of a man who was helping to pull a well. Part of the wicker was removed. The finger caused no trouble for several weeks, and then it started to swell. The piece of steel was removed and the finger apparently healed. Several weeks later the finger again began to swell and infection had set in. This time the finger was cut open and the infection treated. Another company reports a finger infection caused by a puncture from a wicker from a small cable, but the finger quickly healed and there was no lost time.

One company reports that many injuries are caused by wickers, and in some instances these become serious if medical aid is not administered promptly. Finger infections frequently result from skin punctures or the imbedding of steel splinters in the flesh. Correct first-aid treatment can prevent serious trouble from such injuries.

One company reports two instances of injuries caused by the lashing of wire rope. In one case, the end of a cable whipped as the coil was being loaded onto a truck, striking a man on the chin. Considering the injury as minor, he failed to report it, and infection developed. In another case, a cable parted as a tug started to move a barge and a 6-in. section of a strand flew and stuck in the stomach of a man standing 30 ft. away.

One refinery reports that injuries have been caused from handling a heavy wire rope used inside a container. The heat and strain resulted in broken wires which would stick out from the rope. This type of operation has since been discontinued by refinery management.

Several companies report that accidents from handling wire rope are especially likely to occur in field operations. Work in these departments consists of pulling rods and tubing at wells and general winch work of trucks in lifting, hauling, etc.

A good safety record against wire-rope injuries is reported by one company which had an average of 175 men in the plant, of whom 65 were on maintenance. In 8 years of operation, during which time much rigging, etc., has been done by these men, there has not been one lost-time case due to wire-rope injuries.

Many of those returning the questionnaire offered suggestions for eliminating or reducing the risks in handling wire rope. Seven companies suggested the use of leather gloves or gloves with leather palms. Six mentioned careful inspection, and replacement of rope before it becomes worn.

### Advantages of Preformed Rope

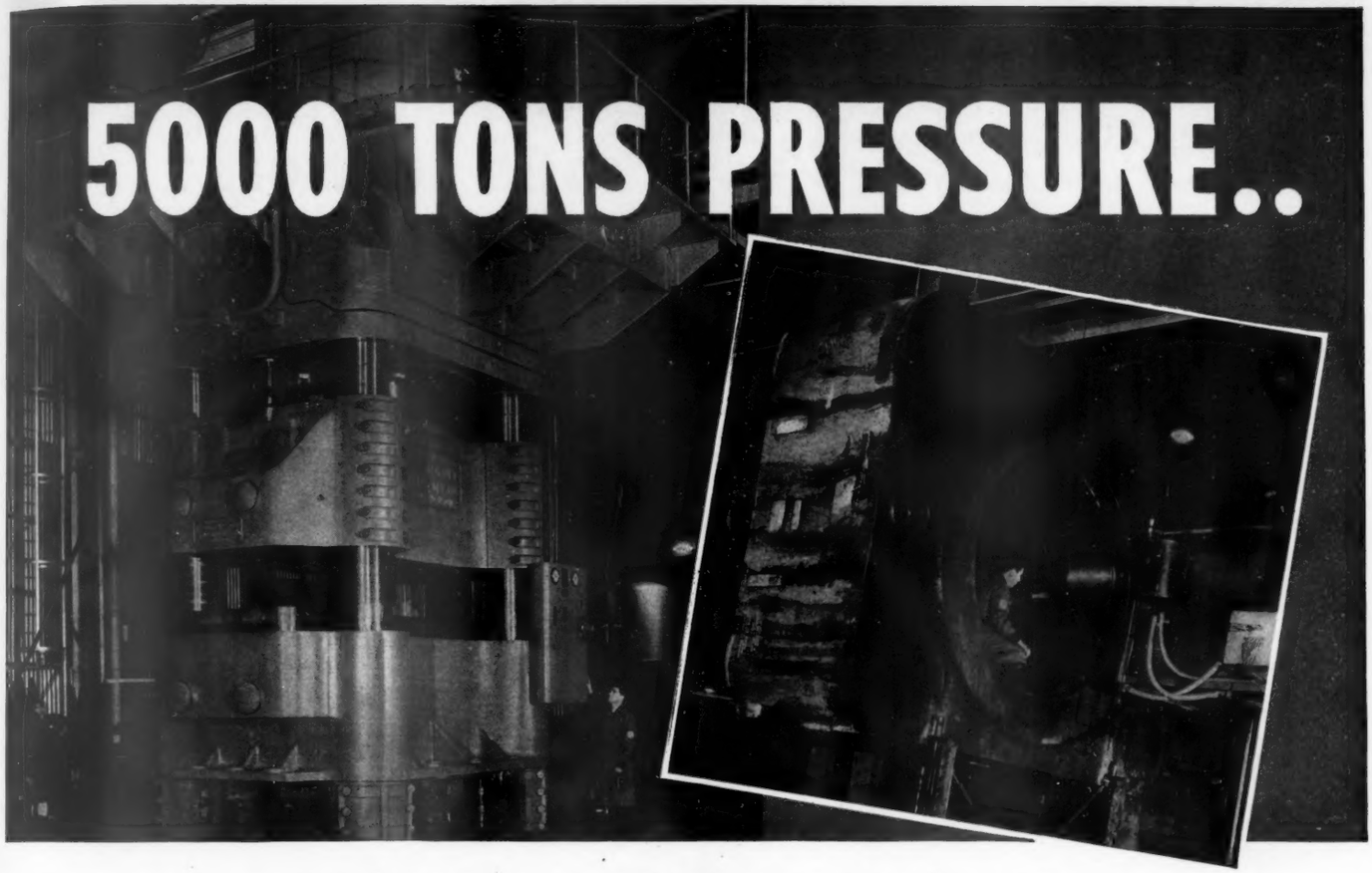
Preformed rope seldom wickers regardless of the extent of wear, and therefore is much less dangerous to handle than nonpreformed rope, say the reports from three companies. Other advantages of preformed rope from a safety standpoint are revealed by a company which reports: "We are now using preformed rope exclusively; it does not unravel when cut and it does not kink when used for hoisting."

The need for proper training of men handling rope is emphasized by four companies, and one says that rope handling should be reduced to the very minimum. Two pointed out the need for proper lubrication to prevent rust, proper training of men in good splicing, winding or clamping of rope before cutting so the ends will not "explode" and the wires fly out, and brazing the rope ends to make them blunt and eliminate the danger of exposure to sharp wire ends. Drivers of winch trucks should realize their responsibility in preventing injuries from rope handling and should be trained with this in view, says one company.

The suggestion is offered by one safety engineer that each spool of rope have a diagram showing safe sling methods, proper clip methods, and load capacity. This, together with cautions to workmen to keep clear of ropes under tension, would go far toward insuring proper rope installation and preventing injuries caused by the whipping and lashing of broken or loose ropes.

More than half of the companies reporting say that their safety programs have been stepped up in recent months in line with increased production.

# 5000 TONS PRESSURE..



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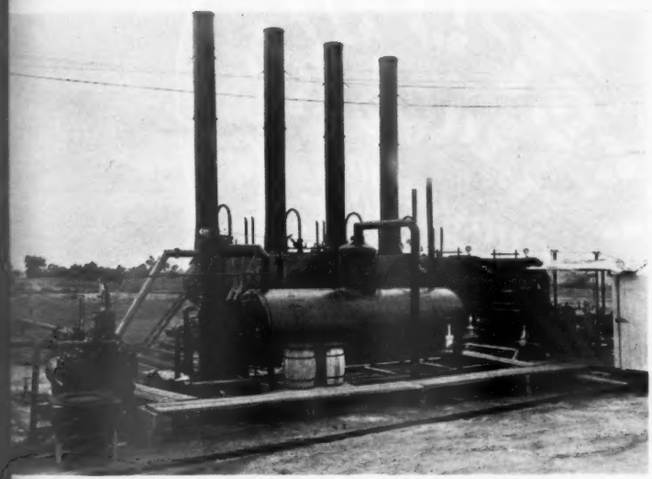
# Operating Ideas

## Barrel of Boiler Used for Water Preheater

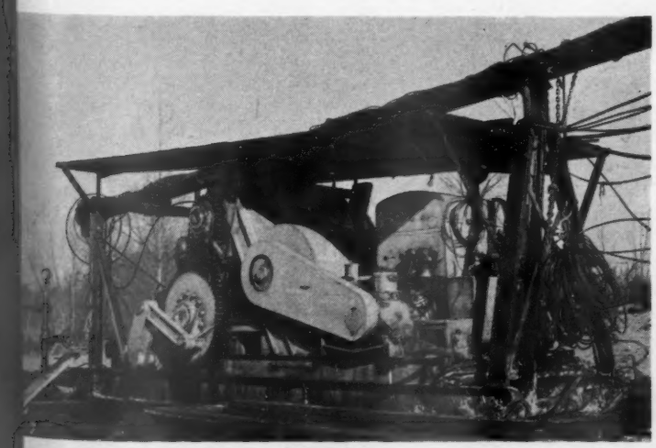
It is sometimes necessary to retire a boiler from service because the fire box has been burned beyond the safety point. The accompanying photograph shows how the barrel of one such boiler continued in active service after its fire box had been sold for



scrap iron. The barrel is being used as a preheater for the water entering the boiler plant. Exhaust steam from the pumps and drilling engines mixes with the cold intake water inside the tank, heating it to 210° F. before it enters the boilers. No pressure is maintained on this preheater barrel. At the left of the barrel is water-treating equipment in which aluminate balls are dissolved for water softening.

## Shed for Spudder

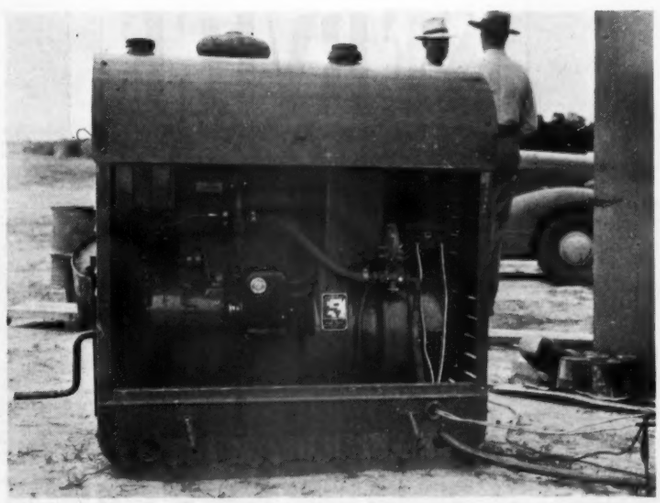
The portability of a spudding machine does not prevent its being protected from weather when it is in use or idle. One Illinois contractor used sheet metal on a frame fastened to the mast supports. The roof has a very low pitch.



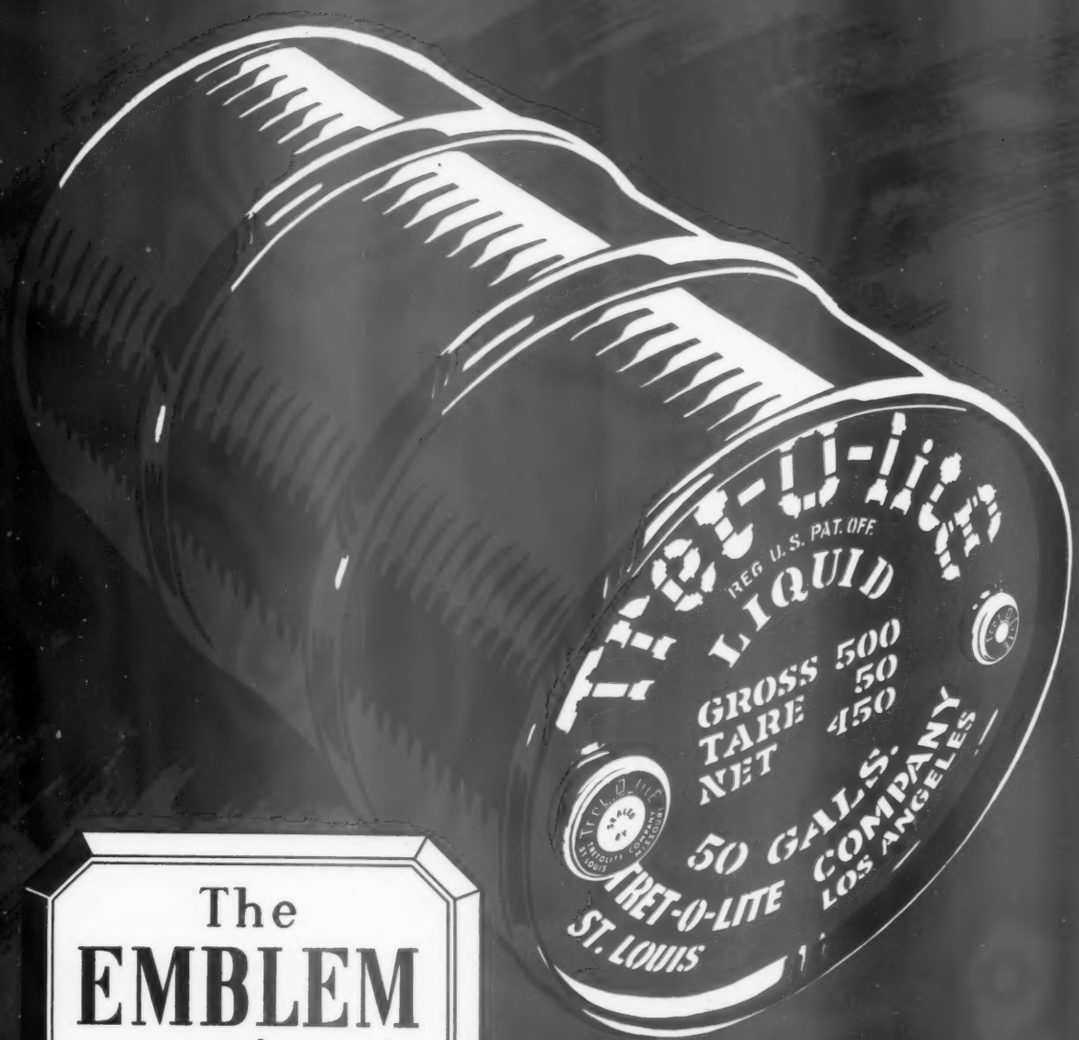
## Steel Work Bench for Light Rig

Care of hand tools is just as important on a small rig as it is on the large ones used to drill the deep holes. Actually, it is a greater factor as the frequent moves cause considerable expense due to the loss of wrenches, hammers, etc. One contractor operating in Illinois has built steel work benches from old pipe and sheet metal for his rigs. Sockets made from short sections of pipe hold the tools. This type of bench eliminates the necessity of building a wooden one after each move and it provides a good working surface and storage place for the tools while rigging up. The bench was made by the contractor's welder from discarded material.

## Small Skid on Light Plant



Several cable-tool contractors in Illinois have reversed the procedure of placing rather heavy skids on the light plant and making them into units which can be carried on a truck. Instead, they are using very short and light-weight skids and slide the motor and generator unit into the tool house when preparing to move the rig. This prevents damage while moving.

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# Repressure Plants Permit Oil Production, Otis Field

By HARRY F. SIMONS

THE Otis gas and oil field, one of the major gas-producing areas in Kansas, is entering a new operating phase, the recycling of gas. At the present time there are two repressure plants in operation and a third is being constructed; this latter plant will also include a gasoline-recovery system. Repressuring in the field was given impetus by the order of the State Corporation Commission granting an allowable of 907 bbl. of oil per day to the 17 combination wells in the pool providing there was no wastage of gas.

The Otis field is located in Barton and Rush counties, Kansas, and includes 14,760 acres of productive Reagan sand. All of the reservoir area is gas-producing territory while 3.09 per cent, or 455 acres, is also capable of producing oil. The field has had an interesting history, much of which is set forth in the order of the Corporation Commission establishing the rules for the field. The engineering report on which the commission's order is based was prepared by Eugene A. Stephenson and John I. Moore, University of Kansas.

The field was discovered in March 1930 by a well drilled by the Milmac Oil Co. in NW 11-18s-16w, which was bottomed at 3,507 ft. in the Reagan sand and made 16,500,000 cu. ft. of gas per day on an open-flow test. Since that time 53 gas wells and 17 oil wells have been completed in the field. First oil was discovered in the northern portion of the field by Ohio Oil Co. on its 1 Mohr, NW 10-18s-16w, at a depth of 3,536 ft. Initial test shows this well capable of producing 153 bbl. of oil and 12,000,000 cu. ft. of gas with a well-head pressure of 1,010 lb. per sq. in.

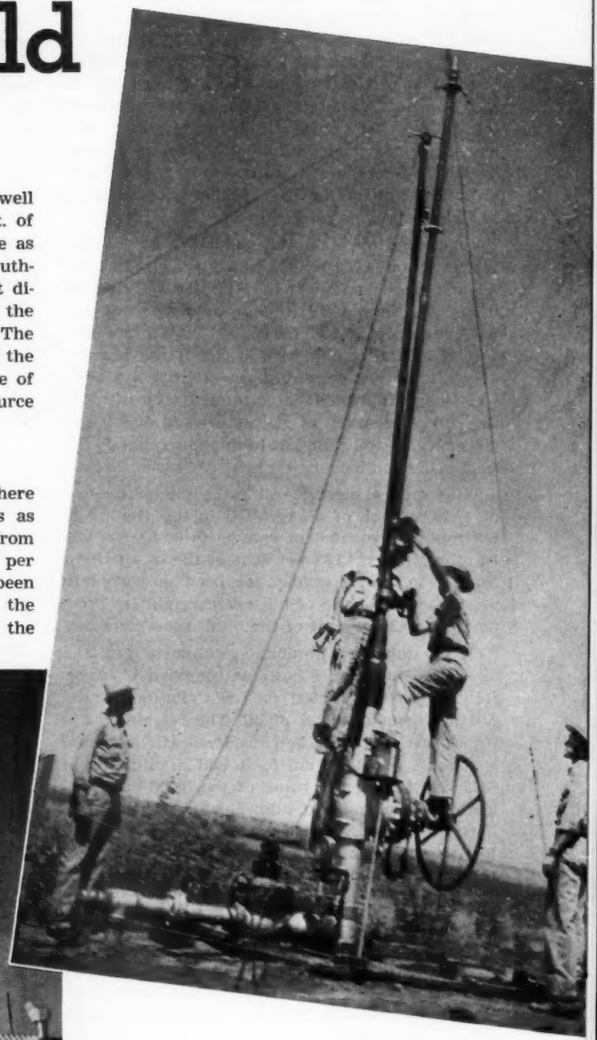
Discovery of the major oil-gas producing area was by the Schermerhorn-Winton Co. on the Maneth-Brackley lease, NE 22-18s-16w, the well producing 700 bbl. of oil and 6,000,000 cu. ft. of gas on the initial test. The oil-producing zone as outlined at the present time lies across the southern part of the field in a northwest-southeast direction. The Reagan sand in the field overlies the granite and is overlain by the Pennsylvanian. The oil-producing zone is on the lower portion of the structure. There has never been any evidence of water drive in the field and gas is the only source of reservoir energy.

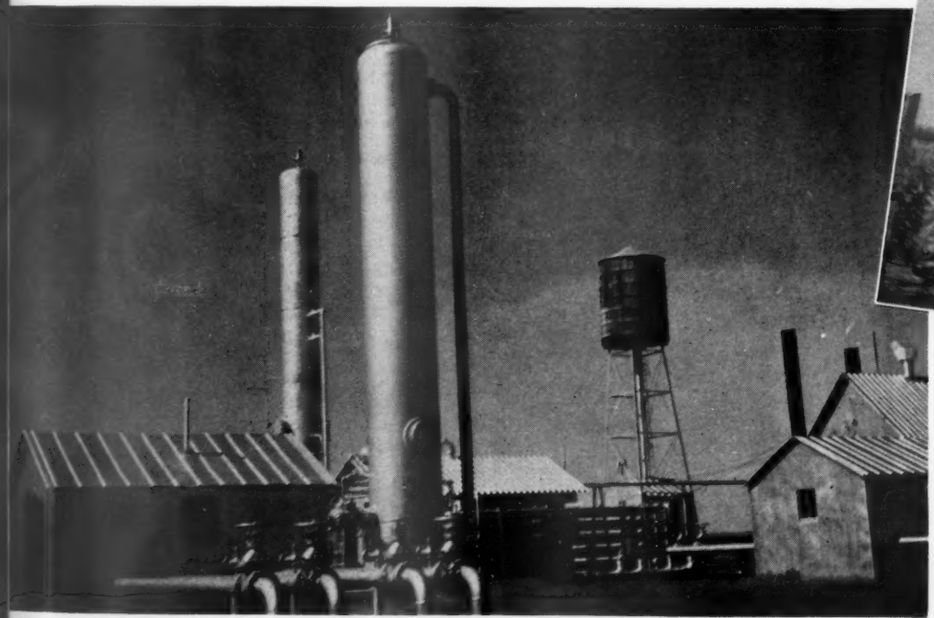
### Prohibit Gas Wastage

Since the discovery of both oil and gas there has been some discord among the operators as to how the field should be produced. Gas from the field is sold for an average of 4 cents per 1,000 cu. ft. and while the market has never been large enough to take the total output from the field, it has been steadily expanding. Part of the gas is sweet and part sour, the latter being treated in two plants. Approximately 10,000,000,000 cu. ft. of gas per year is sold to the Northern Natural Gas Co., Kansas Power & Light Co., Kansas-Nebraska Natural Gas Co., Central Gas Utilities Co. and the Producers Gas Co. The oil production in the field is shipped out by tank car but there is a proposed pipe line which will serve the field.

Oil production in the field was virtually blocked several years ago by the Corporation Commission ruling prohibiting gas wastage and allowing 3,000 cu. ft. of gas production per barrel of oil. The gas must be either sold to the pipe line, replaced in the sand or used for lease or plant operation. Continued wastage of gas would eventually result in the field's being ruined as either a gas or oil-producing territory. There are several other one-well pools in the state which could probably be blown into oil fields by venting the gas but this is prevented by the state regulations. Considerable success has been shown by the large-scale repressuring operation of the oil-gas producing Viola lime at Cunningham and if the Otis repressuring is successful, encouragement may be given to the owners of one-well pools which cannot now be produced.

According to the calculations of Stephenson and Moore, the original bottom-hole pressure in the reservoir was 1,178 lb. per sq. in., with a gage pressure at the well head of 1,064 lb. per sq. in. and the weight of the static gas column computed





*Above: U. S. Bureau of Mines crew pulling bottom-hole pressure and temperature bombs from a gas well in the northeastern portion of the Otis, Kansas, pool*

*Left: Gas-sweetening plant of the Producers Gas Co. used for removal of hydrogen sulfide from the gas produced in the Otis, Kansas, field. The plant is capable of handling 50,000,000 cu. ft. daily*

at 114 lb. per sq. in., after being corrected for deviation. On May 1, 1941, the bottom-hole pressure had declined to 660 lb. per sq. in.

The original gas content of the reservoir was estimated to be 207,900,000,000 cu. ft. of gas. Original oil content was estimated to be 6,044,343 bbl. at reservoir conditions and 5,912,577 bbl. of stock-tank oil of which 50 per cent should be recovered. Up to May 1, 1941, 99,200,000,000 cu. ft. of gas and 1,410,868 bbl. of oil were produced leaving approximately 108,700,000,000 cu. ft. of gas, of which 93,700,000,000 should be recovered; total oil recovery on that date was 1,410,868 bbl., leaving approximately 1,545,420 bbl. to be produced. The estimate of recoverable gas is based on no venting of the gas produced with the oil and an abandonment pressure of 50 lb. per sq. in.

Total pipe-line sales of gas on May 1, 1941, amounted to 64,000,000,000 cu. ft. measured at 16.4 lb. per sq. in. and 60° F. Another 6,100,000,000 cu. ft. had been used to that time in plant and well operation and 29,100,000,000 cu. ft. has been vented by the combination wells. If the practice of venting were continued, an additional 43,100,000,000 cu. ft. would be consumed uselessly and the future recovery of gas reduced to 50,600,000,000 cu. ft. Gas-oil ratio has been approximately 20,900 cu. ft. per barrel.

With such a high gas-oil ratio, the production of 1,410,868 bbl. of oil resulted in the voiding of reservoir space equal in volume to 66,400,800 bbl. In other words, 13.83 per cent of the original gas content in the reservoir has been employed in producing a volume of oil which originally occupied only 0.3 per cent of the total reservoir space.

Of the total gas production accompanying the oil 4,232,604,000 cu. ft. can be considered as usefully employed as 3,000 cu. ft. is allotted for the production of a barrel of oil. The remaining 24,800,000,000 cu. ft. can be considered as excess and at 4 cents per 1,000 cu. ft. it had a valuation of $992,000. Adding the value of the 3,000 cu. ft. of gas produced as the allowable acompanying a barrel of oil (4,232,604,000 cu. ft.) the total money lost through gas wastage amounts to more than the revenue obtained from all of the oil produced in the field.

Continuance of the venting of gas through the remaining life of the field would result in 43,100,000,000 cu. ft. being lost to the atmosphere. The value of this gas is greater than value of all of the oil remaining in the reservoir at the present market prices.

The gas pay at Otis has a thickness of 30 ft. and the oil pay has a thickness of 13.7 ft., according to well logs examined by Stephenson and Moore. The average porosity as shown by the analysis of cores from two wells was 12.5 per cent.

Originally 1 cu. ft. of void space in the reservoir was occupied by 78.06 cu. ft. of gas. Based on the reserves then present, 98.75 per cent of the reservoir space was occupied by gas and 1.25 per cent by oil. The pool is primarily a gas pool as the figures shown above indicate.

At the present rate of gas production the abandonment pressure (50 lb. per sq. in.) will be reached in 10 years and if the gas from combination wells is recycled provisions will have to be made to recover the oil still in the reservoir during that time. A flat allowable of 480 bbl. per day for the pool would permit the recovery of the 1,545,420 bbl. of oil in 9 years. However, the permeability of the formation with respect to oil decreases progressively as the reservoir pressure declines due to the withdrawal of gas from solution and the allowable should conform as nearly as possible to the pool's ability to produce. The pool allowable in accordance with this idea should start at 27,200 bbl. per month (907 bbl. per day) for the year beginning May 1, 1941, and decrease gradually to zero at the end of the ninth year, according to Stephenson and Moore.

Daily allowable for the pool for successive years is as follows: 907 bbl., 800 bbl., 693 bbl., 587 bbl., 480 bbl., 373 bbl., 267 bbl., 240 bbl. and 240 bbl.

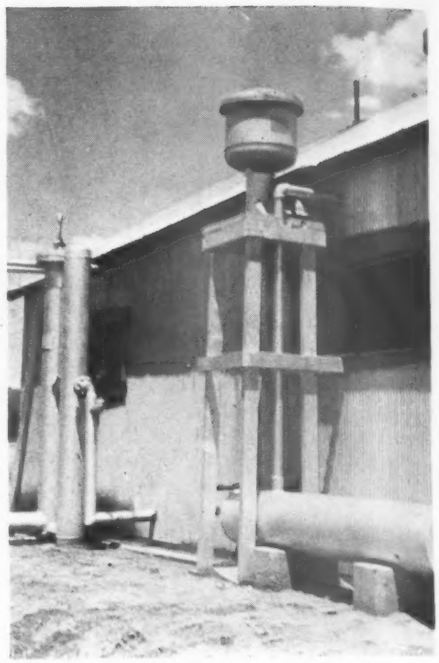
### Type of Plants

Both of the plants in operation at Otis at the present time are solely for repressuring and include no equipment for gasoline recovery. They are oth owned by the Kenwood Oil Co., which succeeded Schermerhorn-Winton in the operation of the leases. One of them is located in 22-18s-16w and the other in Section 23 of the same township.

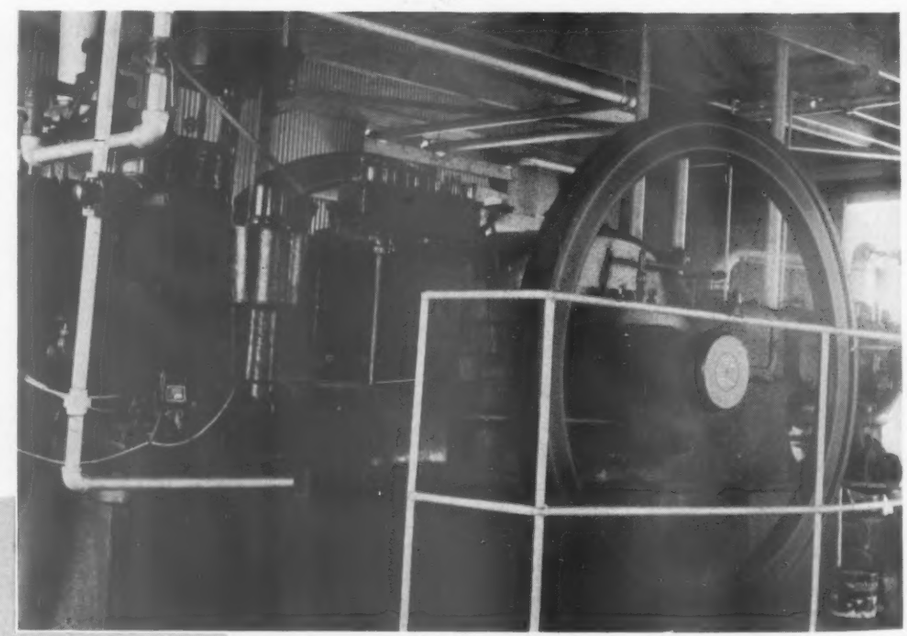
Essentially these are the same except for the number of units, the one in Section 22 having a single compressor and the one in Section 23 having one compressor operating and the foundation set for a second one. Preparations are being made for enlarging the latter plant through the addition of a third compressor. The compressors have a capacity of 1,000,000 cu. ft. daily. One injection well is connected to each plant.

Gas is taken from the separators at the well site and brought to the plant through a 4-in. line where it is passed through a scrubber. Scrubber on the single unit plant is 8 in. by 8 ft. and has a working pressure of 500 lb. per sq. in. The gas is taken into the low side of the two-stage compressor at 100 lb. per sq. in. and brought up to 250 lb. per sq. in. It is then passed through a small heat exchanger and delivered to the high side from which it emerges at a pressure of 800 lb. per sq. in. The compressor operates at 240 r.p.m. and is capable of a continuous output at

*(Continued on Page 44)*

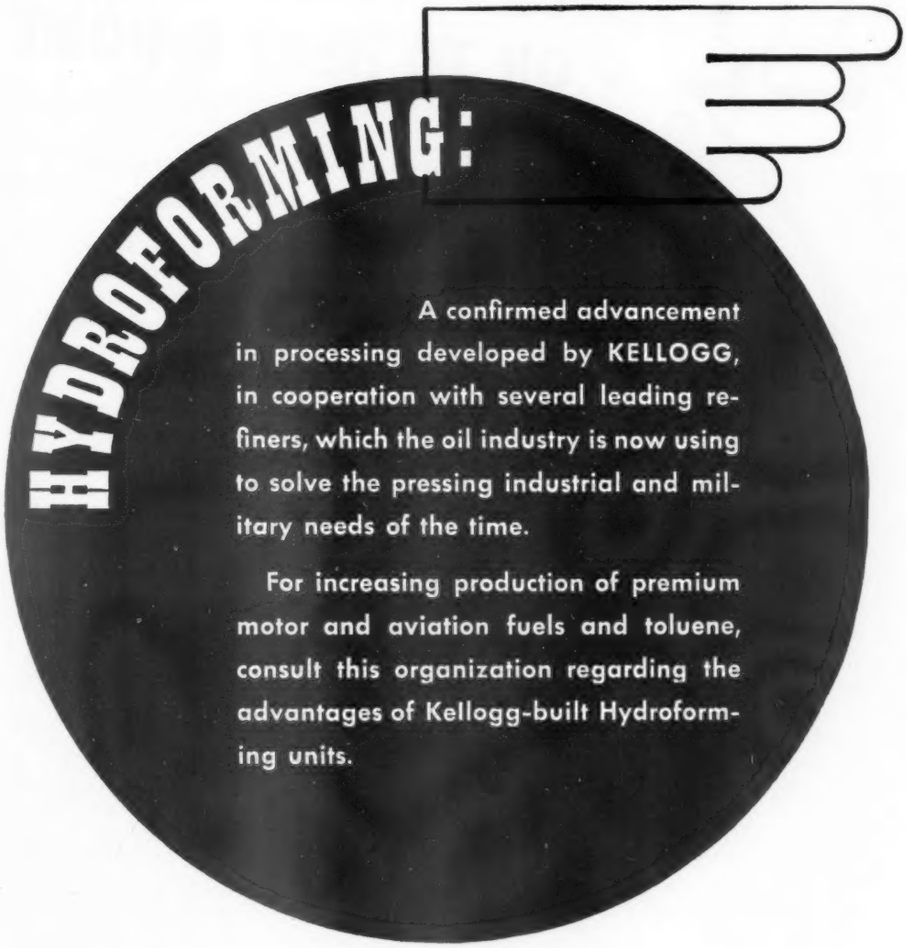


***Scrubber, left, removes liquid from the incoming gas at a repressure plant in the Otis, Kansas, field. Volume tank for the compressor sets on concrete blocks at right with air intake cleaner above it***



***Right: Two-stage, twin-cylinder compressor capable of handling 1,000,000 cu. ft. of gas per day at 850 lb. per sq. in. pressure used for repressuring at Otis, Kansas***

***Injection well used for returning the gas to the Reagan sand in the Otis, Kansas, field with the building housing one of the repressuring plants in the background***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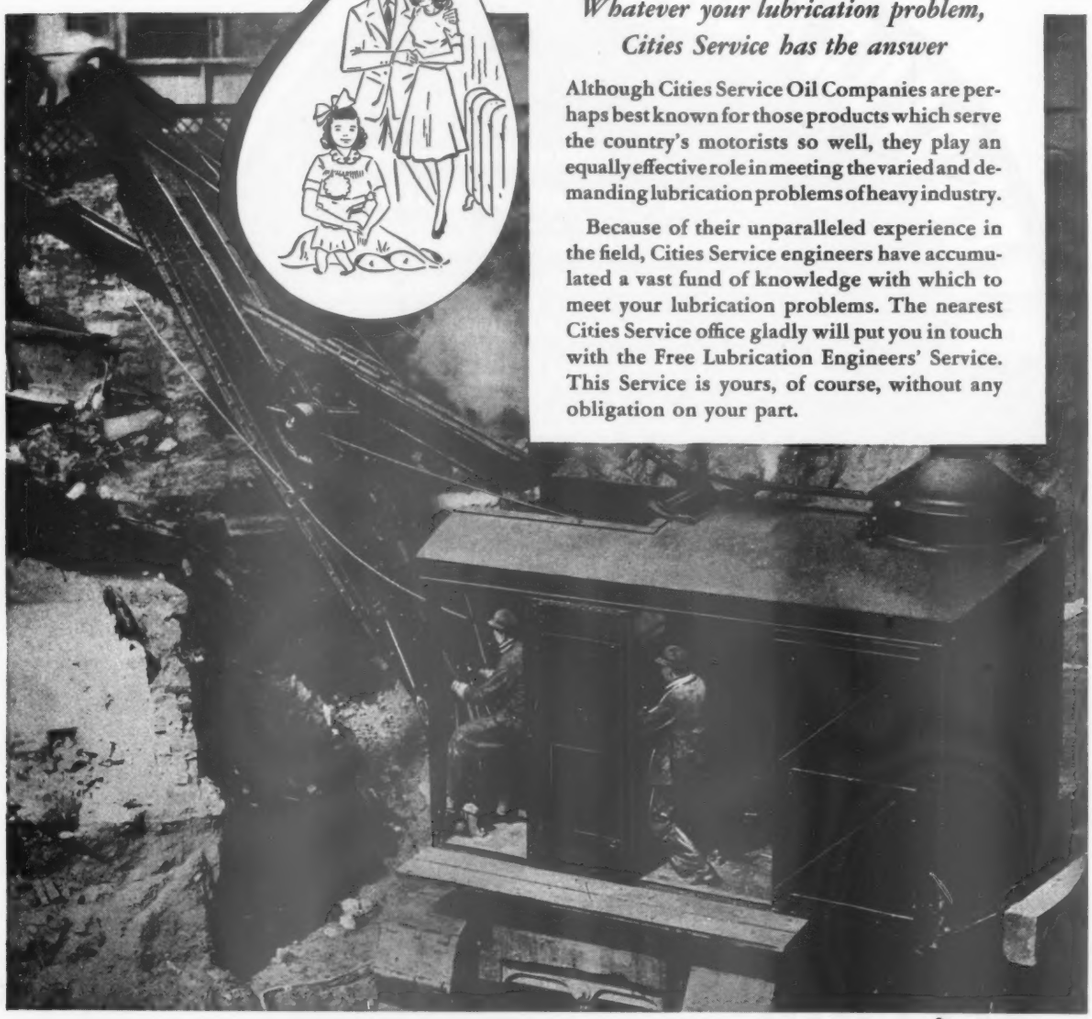

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# METALS In REFINING

By W. L. NELSON

## Low-Temperature Services

FOR many years most of the difficulties in the use of metals in petroleum refining have arisen through high temperatures, corrosion by oil, or the extreme stresses incurred by high pressure. Now with the advent of low-temperature dewaxing processes, the lack of ductility of most alloys and steels at low temperatures introduces another difficulty. Moderately low temperatures are also employed to some extent in the treatment of high-sulfur gasolines with sulfuric acid, and in the production and storage of liquefied natural gas at low temperatures in connection with city gas systems. Obviously, there is always the need for low-temperature steels in refrigeration plants.

**This is the fourth of a series of articles on the use of metals in petroleum refining. Other articles which have appeared are: "Composition and Scaling Resistance of Pipe-Still Tubes," April 3, 1941, Page 82; "Corrosion Resistance and Strength of Pipe-Still Tubes," April 17, 1941, Page 179; and "Still Castings and Furnace Auxiliaries," May 1, 1941, Page 39.**

**It is planned that in the future the applications of metals for piping, condensers, heat exchangers, pressure vessels, pumps, dewaxing, treating, towers, instruments, and the laboratory, will be presented. The recommendations in these articles have been taken from current magazine articles and from bulletins of manufacturers. They are not necessarily the recommendations of the editorial staff of The Oil and Gas Journal.**

**Low-temperature materials.**

There are two general types of materials that are suited for low-temperature service. These types are the solid-solution alloys including the austenitic steels, and the low-alloy steels which contain alloy elements that are soluble in the iron or ferrite. Some pure metals also exhibit good low-temperature strength.

Courtesy Timken Roller Bearing Co.

***Seamless tube entering sizing mill. A mandrel on inside and rolls on outside smooth inside diameter and outside diameter and give uniform wall thickness to tube***

If impact strength at exceedingly low temperatures is required, solid-solution alloys or pure metals such as the following are necessary:

Monel metal (copper nickel, Ref. 28).

Stainless iron or steel (18-8 chromium nickel, Ref. 29 and 30).

Nickel austenitic steel (over 40 per cent nickel, Ref. 29).

Copper, nickel, lead, etc. (pure metals, Ref. 30).

Duralumin (fair elongation, Ref. 30).

These materials may in general be used down to the temperature of liquid air or about minus 300° F.

The cost of most of the above solid-solution materials precludes their use for many constructional or machine purposes and hence the low-alloy steels and some nonferrous alloys have been developed for services down to minus 40° to minus 200° F. In steels, the most widely used alloy element has been nickel, although the use of copper, manganese, silicon, etc., have been found useful by some investigators. Among such materials are:

Nickel steels, all nickel S.A.E. series (Ref. 31).

Molybdenum steels, all S.A.E. series (Ref. 31).

Manganese silicon steels (good to about minus 50° F., Ref. 32).

Vanadium steels (Refs. 35 and 36).

Bronze (welds, Ref. 33).

With the exception of nickel, which may be considered as a "specific" for the improvement of impact strength at low temperatures, the effect of other elements must be considered as only indirectly contributing to low-temperature strength. Main among the secondary effects of alloy elements is the refinement of grain size that such elements may produce. Thus, aluminum and vanadium are used to control grain size and to some extent the same is true of molybdenum, chromium and zirconium. Othere elements such as nickel, copper, silicon, and manganese may act by strengthening the ferrite.

**Impact strengths.**

The engineer finds difficulty in stating just how long an impact strength can be permitted without danger of failure but for most situations a Charpy strength exceeding 10 ft.-lb. at the service temperature is found adequate.

In other articles of these series an attempt has been made to indicate the specific physical properties of the various alloys or steels that are suitable, but in the case of low-temperature strength such confusion exists because of the use of numerous kinds of test methods and because of the pronounced effect of grain size, that a direct comparison of materials should not be made. Rather, the general temperature range at which the impact strength drops rapidly has been investigated and the results on a number of materials are shown in Table 8 and Fig. 3.

In connection with Fig. 3, it is not intended that a high value on the chart indicates a high impact strength. The real significance of the

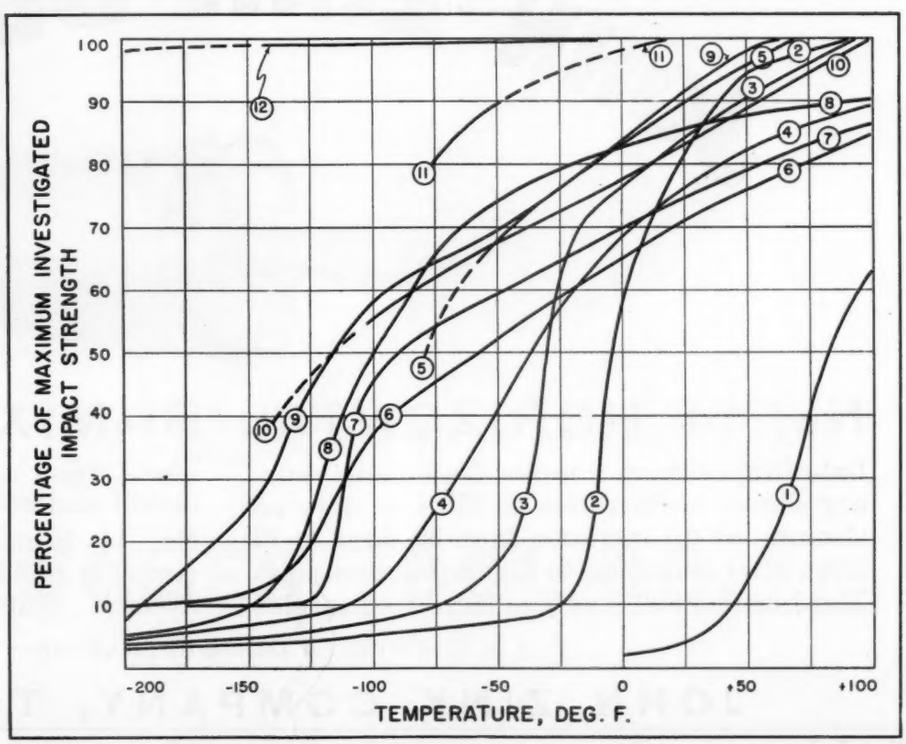


***Fig. 3—Relative impact strengths of metallic materials at various temperatures. See Table 8 for kinds of materials***

**TABLE 8—CHANGE OF IMPACT STRENGTH WITH TEMPERATURE (SEE FIG. 3)**

| Curve No. | Material (steel unless designated)— | % C | Others | Notes | Ref. |
|---|---|---|---|---|---|
| 1 | 4-6 chromium | 0.17 | 5 Cr | After high-temp. service | 35 |
| 2 | Carbon (basic Bess.) | 0.04 | ..... | Nearly pure iron | 34 |
| 3 | Carbon (open hearth) | 0.15 | ..... | Regular carbon steel | 34 |
| 4 | Vanadium | 0.15 | 0.46 Va | ..... | 35 |
| 5 | Manganese vanadium (castings) | 0.32 | 1.11 Mn ave. | Normalized and tempered | 36 |
| 6 | Silicon manganese | 0.15 | 0.89 Si, 1.12 Mn | ..... | 34 |
| 7 | Copper manganese | 0.19 | 0.6 Cu, 1.09 Mn | ..... | 34 |
| 8 | Zirconium | 0.16 | 0.66 Zn | ..... | 35 |
| 9 | Copper chromium | 0.15 | 0.85 Cu, 0.51 Cr | ..... | 34 |
| 10 | Nickel | 0.2 | 2.1 Ni ave. | Normalized | 37 |
| 11 | Molybdenum | (Average of many kinds*) | | About 300 Brinell | 38 |
| 12 | Austenitic steels, lead, copper, nickel, monel metal, etc. | ... | ..... | Solutions or pure metals | 39 |

*S.A.E. 4130, 4615, 4140, 4815, 4340, 4640.

chart is the rate of loss of impact strength or the point on a curve where the strength drops so rapidly that the behavior of the alloy becomes unpredictable. Certain of the materials lose strength at particular temperatures, such as curves 1, 2, 3, 5, 6, 7, 8, 9, and 11. Thus, carbon steel is seldom dependable below minus 30° F., manganese vanadium castings below minus 75° F., and nickel steels below minus 150° F.

Still another confusing fact about Fig. 3 is that data were not available over the same temperature range for all of the materials. Curves which extend to 100 per cent are based on the impact strength at the 100 per cent point (and temperature) whereas the other curves are based on maximum values which occur at temperatures higher than those shown on the chart.

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## Repressure Plants Permit Oil Production, Otis Field

*(Continued from Page 40)*

850 lb. per sq. in. and an intermittent output of 1,000 lb. per sq. in. The gas going to the injection well is definitely hot as no effort is made to cool it except between the two stages of the compressor.

Incidental equipment includes a circulating pump for the engine jacket water and the heat exchanger. This is driven by belts from the flywheel. There is also a small engine, air compressor and volume tank for cranking the engines. All of the piping in the building is either overhead or underground. The high and low sides of the compressor are bypassed for starting.

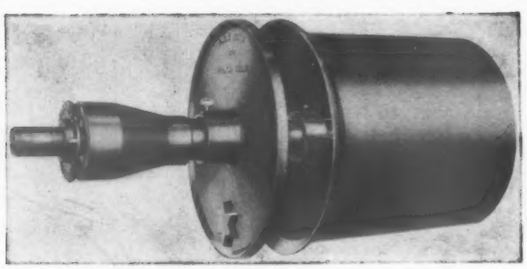
Injection wells must be located at least a mile from the oil-producing zone or permission for the location obtained from the Corporation Commission. All of the injection wells used are therefore former gas wells. In one case the gas well refused to take the input gas and another well had to be selected.

### New Plant

The new plant, being erected by Morgan, Flynn & Cobb, will be not only larger than the two plants now in operation but it will also include facilities for the recovery of gasoline. The plant will have a capacity of over 12,000,000 cu. ft. daily of which approximately 10,000,000 cu. ft. will be returned to the formation and the remainder will be used as plant fuel. Cost of the plant will be between $65,000 and $75,000.

There will be five two-stage compressors of 230 hp. each used. These will be rebuilt compressors as new ones cannot be obtained at this time. There will also be a 200-hp. electric-generating system installed in the new plant. The type and design of the gasoline-recovery equipment has not been selected pending the testing of the gas for gasoline recovery. It must also contain equipment for the removal of hydrogen sulfide. Erection of the plant is under the direction of C. J. Smith, Tulsa.


JOHN ZINK BURNERS



No. 14 HORIZONTAL BI-MIX—Short Flame

Latest report from a major Gulf Coast refinery shows an increase of 125% in time on stream—or an increase from 35 days to 79 days after changing to Bi-Mix burners. John Zink burners will give you increased service also. They are easiest to buy—easiest to install and easiest to maintain.

No. 14 Horizontal Bi-Mix Burner has a capacity of 4,000,000 B.T.U. per hour. Draft .15 inch. Shipping weight 110 lbs.

*—Write for Descriptive Bulletin—*

JOHN ZINK COMPANY, Tulsa, Okla.

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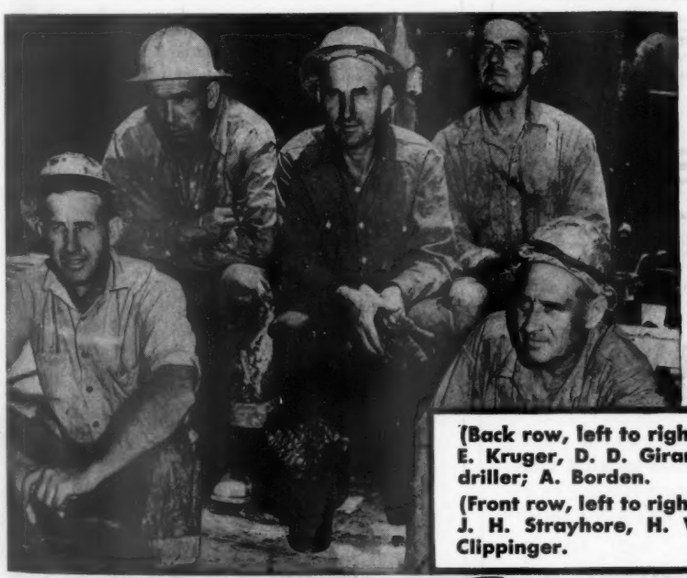
# ANOTHER NOTABLE DRILLING ACHIEVEMENT

**Honolulu Oil Corporation's Well No. 25-P, Kern County, California, which attained a depth of 14,622' is an achievement worthy of high acclaim . . . a tribute to the knowledge, resourcefulness and skill, not only of the officials of the Company, but of every man on the rig.**

**We are justly proud that Hughes Tricone Rock Bits played an important role in the drilling of this deep test.**

**THE FOLLOWING ROCK BITS WERE USED:**

| *Size Bits* | *Hughes Tricones* | *Other Makes* |
|---|---|---|
| 12¼"..... | 9 | 6 |
| 11"..... | 1 | 0 |
| 10⅝"..... | 55 | 2 |
| 8⅝"..... | 58 | 15 |
| 8½"..... | 26 | 0 |
| 7⅝"..... | 1 | 0 |
| **Totals** | 150 | 23 |
| **Percentage** | 86.7% | 13.3% |



**(Back row, left to right): E. Kruger, D. D. Girard, driller; A. Borden.**

**(Front row, left to right): J. H. Strayhore, H. W. Clippinger.**

**DEEP OR SHALLOW— THERE'S A HUGHES "TAILOR-MADE" ROCK BIT**

# HUGHES TOOL CO.

## HOUSTON, TEXAS

# ROKON *PROTECTS*

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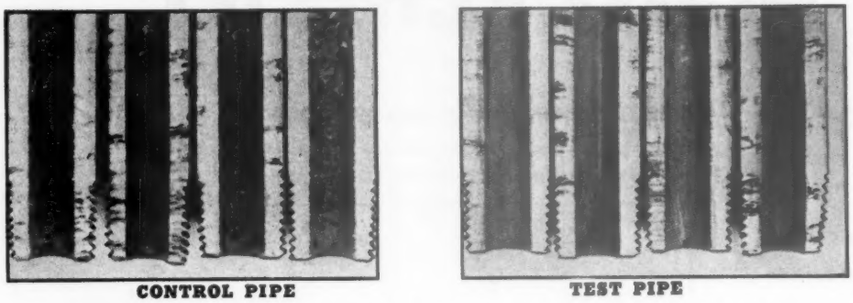

CONTROL PIPE — TEST PIPE

Gasoline after passing through the control pipes was treated by the addition of 40 pounds of ROKON per 25,000 barrels and carried through the test pipes. The photographs show the clean condition of the interior resulting from the protection afforded by ROKON.

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equipment and increase production.
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*Write for descriptive folder!*

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**GARLOCK**

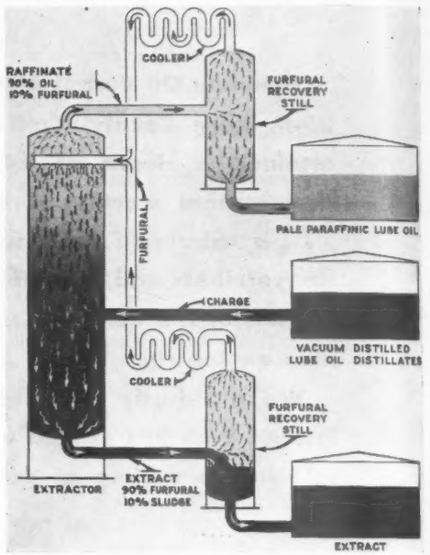

## Continental Adds Four Types Of Solvent Units

*(Continued from Page 31)*

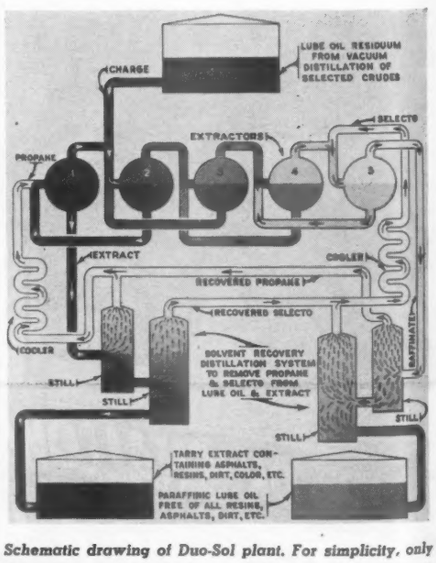
and is of sufficient volume to reduce the viscosity of the oil greatly. Then as this mixture is run through a centrifuge the wax collects on the inside of the swirling mass and is continuously removed.

The M.E.K. plant dewaxes about 900 bbl. per day of light raffinate or about 750 bbl. per day of the heavy waxy raffinate. The plant operates in the conventional manner, two rotary vacuum filters handling the daily charge.

From the filters the two streams go to solvent-recovery units. The crude-scale wax is then charged to the sweat-pans. Present production is adjusted to make a 130-M.P. wax.




***Principle under which furfural (alpha furfuraldehyde) plant operates. Light vacuum-distilled lube stocks up to the S.A.E. 30 grade are contacted with solvent in the extractor. The lighter paraffinic hydrocarbons rise as the heavier asphaltic fractions are washed to the bottom. Each is continuously removed for separate processing***




***Schematic drawing of Duo-Sol plant. For simplicity, only five stages of separation are shown, whereas Continental uses seven***

# Pipe-Line Activity

## Cole Pipe-Line Bill Is Signed by President

WASHINGTON, D. C.—President Roosevelt has signed the pipe-line bill, giving the administration authority to construct a network of pipe lines to transport oil.

The law is designed to permit transportation of petroleum into the industrial East, where a shortage of tankers has created threat of a serious lack of oil and gasoline.

## Canadian and U. S. Officials Attend Pipe-Line Ceremony

Canadian and United States sections of a yet uncompleted 236-mile pipe line intended to relieve an oil-tanker shortage were welded together at the international border August 1 in a colorful ceremony attended by officials of both nations.

The $8,000,000 project, designed to carry crude oil from a tanker terminal in South Portland, Me., to refineries in Montreal, Que., is scheduled to begin operations late this fall.

The Canadian delegation to the electric-welding ceremony conducted exactly on the boundary about 2 miles from North Bay, Vt., was headed by G. D. Howe, minister of munitions and supplies, and Adelard Godbout, prime minister of Quebec.

J. D. Moffat, United States minister to Canada, led the American delegation, which included Vermont's governor, William H. Wills, and W. S. Farish, president of Standard Oil Co. (New Jersey).

## Stanolind Pipe Line Increases Facilities

Work is starting this week on the construction of 62 miles of 10-in. pipe to be laid in four loops between Washington, Kans., and Freeman, Mo., which will increase the capacity of the trunk line from 30,000 to 45,000 bbl. The laying of the line has been contracted by O. C. Whitaker Co. This project is scheduled for completion September 1.

The last of the loops for the crude-oil trunk system between Texas and Whiting, Ind., consists of 7 miles of 18-in. which is now being laid in Lake County, Indiana. This will complete the work which has been going on in the first half of this year to provide for the segregation of crudes in transit. As a result it will be possible to transport crudes in three grades. One of these is Winkler crude from West Texas; this is the only crude from a single area which is handled all the way through to the Standard Oil Co. (Indiana) refinery at Whiting, Ind. Oklahoma crudes and crudes from Kansas as far west as Russell County are shipped together. Another grade includes East Texas, Wyoming, and the lower-gravity crude from fields west of Russell County, Kansas. In this grade, crude from the Cumberland, Oklahoma, field would be included if the company should transport it.

Stanolind Pipe Line Co. is putting in operation the Lakenon pump station which has been shut down for several years. Repairs in the line are going forward between Graford and Bowie, Tex., and will complete the program started in winter months for the system between Mexia and Bowie, Tex., At present the only station now shut down north of Mexia is the one at Cresson, Tex. South of Mexia the Easterly and Singleton stations will continue to be shut down. Stanolind is pumping about 20,000 bbl. per day through the Texas trunk line consisting of 8 and 10-in. pipe. Of this, 7,000 bbl. comes from the Fairbanks area near Houston and 13,000 bbl. comes from East Texas.

## Pipe Shortage Hampers Laying of 26-in. Loops for Chicago Line

Construction work carried on by C. S. Foreman Co. and O. E. Dempsey Construction Co. in the laying of 26-in. loops for Natural Gas Pipeline Co. of America has been shut down because of shortage of pipe. Deliveries for part of the work are scheduled to be resumed this week. It is reported that work has continued to progress on the section of the line at the western end which was contracted by W. A. Bechtel Co. and which is approaching completion. The program of Natural Gas Pipeline Co. of America was planned for the purpose of increasing deliveries of natural gas from the Texas Panhandle to Chicago. Part of the increased capacity would be available for serving Wisconsin markets in case authorization is given to the company making it possible to enter the state. An article describing the Wisconsin natural-gas pipe-line situation appears elsewhere in this issue. Early this year contracts were let for the construction of about 400 miles of 26-in. pipe to be laid in loops. Work undertaken by W. A. Bechtel Co. early in the spring was at the Panhandle and western Kansas end of the line. C. S. Foreman Co. contracted a section in Kansas in the vicinity of Salina. O. E. Dempsey Construction Co. contracted to lay the loop in western Iowa. A loop which W. A. Bechtel Co. contracted in the Muscatine, Iowa, area was shut down in June with the understanding that work would be resumed in September. The company plans to lay an additional 400 miles of 26-in. which will give it a complete 26-in. line from the Panhandle to Chicago in addition to the present 24-in. line.

## Kaw Prepares to Build Bemis-Ray, Kansas, Line

Kaw Pipe Line Co. has received bids and is letting contract this week for the construction of a 40-mile 6-in. crude-oil line which will connect the Ray pool in Phillips County, Kansas, with the company's system in the Bemis pool, Ellis County, Kansas. Pipe deliveries are scheduled to arrive this week. Work will be under way August 15.

## Gulf Starts Construction of Loop Near Broken Arrow, Okla.

Gulf Refining Co., Tulsa Pipe Line Division, is starting construction this week on the 16-mile loop of 10-in. pipe near Broken Arrow, Okla. This is part of the program which includes the laying of 13 loops with a total of more than 200 miles which will be located between the Perryman station near Jenks, Okla., and Dublin, Ind. These loops will increase the capacity of the line from 43,000 bbl. to 54,000 bbl. per day. The Broken Arrow loop is being laid by Williams Brothers Corp. under supervision of A. M. Garber, who will complete this loop before going to Atlanta, Ga., for this contractor's work which will start after the middle of the month for Plantation Pipe Line Co.'s project.

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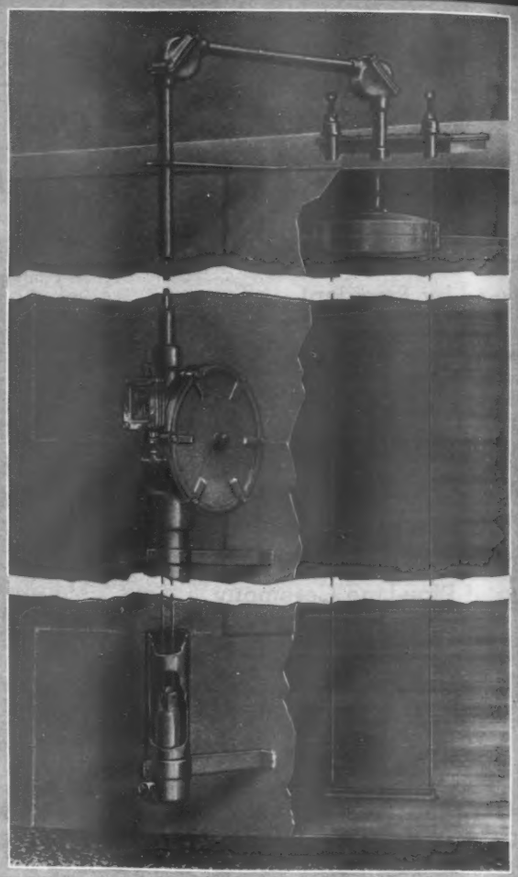

**In engineering** and technical fields, the greatest contributions are usually made by specialists. With a background of wide experience in a narrow field, all energies are bent toward the creation of highly specialized equipment which performs its individual function well, and operates to perfection with closely related units.

If you are interested in the conservation of valuable vapors, and the safety of your tankage, bring your problems to a firm that specializes in this field. You are assured of a uniformly high quality of design, material and workmanship.

**WEATHERPROOF BREATHER**
**Figure ST-949**
A poppet type breather valve with pallets designed to provide maximum efficiency of vapor conservation and tank safety under all weather conditions.

**AUTOMATIC TANK GAUGE**
**Figure ST-2935**
A simple, accurate and inexpensive automatic tank gauge applicable to cone and dome roof tanks. It obviates the hazard of climbing tank tops, is gas tight and gives an accurate measurement at eye level, with gauger on the ground.

**SPARK PROOF GAUGE HOLE COVER**
**Figure ST-191**
These self closing gauge hole covers are manufactured of various combinations of metals which are non sparking. They are gas tight and designed so that condensation is carried away from the seal.

**FLAME ARRESTER**
**Figure ST-863**
This flame arrester . . . listed by Underwriters Laboratories . . . combines a positive fire stop with maximum flow capacity.

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# FIELD DEVELOPMENTS...

## HIGHLIGHTS FROM THE WEEK'S NEWS—

Blue chips were being played last week in the search for new reserves. Two huge possible producing areas, long believed to be among the most important in the country, were tested. One, in West Texas south and east of the old Big Lake field, paid off with a major strike by Amerada Petroleum Co. The other, deep zones on the Buena Vista Hills anticline in California, was, if not a complete failure, at least a hard setback for both the Navy and private operators who had long been confident the deep zones on that structure would provide tremendous reserves.

West Texas, which already holds the greater part of Texas' estimated 80 per cent of the nation's total known reserves outside of California, has figured large in all long range plans for drilling, production and transportation ever since 1926.

At least one of the large blocks of acreage held under lease there is now proved to be on a good pool, and lease requirements of State University lands, which make up 15,000 acres of the 25,000 acre block, indicate extensive drilling will get under way soon around the strike. The strike, coupled with recent purchases and reports of additional purchases of production in West Texas by Stanolind Oil & Gas Co., gave rise to speculation that major developments in West Texas were in the offing.

The California disappointment came with the issuance of orders to plug back Honolulu Oil Corp. deep test on the Honolulu anticline which comprises the eastern end of the Buena Vista Hills structure in Kern County. The test had been drilled to 14,622 ft. where it had mechanical difficulties and sufficient subsurface information had been revealed to convince the operators that it was useless to drill ahead. Instead of finding deep formations they had expected, the well found a substantial thickening of the upper and middle Miocene and no productive zones were found. In addition, the formation was showing 55 degree dips further discouraging possibilities.

In a third area in which a large part of the industry either expects to find major production or is holding large acreage for protection, the Rocky Mountain states, the increase of production from fields already developed continued. Latest shift was in northwestern Colorado where Mountain Fuel & Supply Co. was reported moving around 1,000 bbl. a day from one lease in the East Hiawatha field and 200 bbl. a day from the Powder Wash field. This oil was being trucked to the Union Pacific railroad in Wyoming and moved by tank cars to destination. It was about twice the daily average production from Hiawatha during the first 6 months of this year.

Completions for all areas rose to a near-record high and a new high for the year with 699 total. Of these, 468 were new oil wells, 69 were gas wells and 162 were dry holes. While there was a slight drop in the new work reported, conditions were such that the drilling pace might be expected to hold at that rate for some time to come and might even pick up because of the major discoveries in nearly all areas.

**MICHIGAN:** Reed City's oil boom held up with more big inside wells completed and outpost tests starting as far as 2 miles away. Roscommon County's new field was also getting a good play. (p. 80)

**CALIFORNIA:** While the Honolulu Oil Corp. deep test at Buena Vista Hills was being plugged back as a failure in the Miocene sands, there was a possibility it might make a well in higher zones. Meantime the new Raisin City field was established as an important new area, the first north of Coalinga, with the completion of the second well for 736 bbl. of oil. Gas supply opened by the discovery well may replace North Kettleman Dome gas soon to be piped to the San Francisco Bay area (p. 63).

**NORTH LOUISIANA:** First discovery outside La Salle Parish in the Wilcox play came in to the north in Caldwell Parish as a gas well. Unless oil is found, however, it is not expected to lead to extensive drilling. (p. 55)

**EASTERN TEXAS:** Pleasant Grove field in Rusk County, a new pool, came in line for steady development after a new gage on the discovery well upped its potential from 7 bbl. to 215 bbl. (p. 77)

**NORTH CENTRAL TEXAS:** Extensive wildcatting of recent weeks led to opening of a new pool last week, two more showing for discoveries and another being extended. (p. 58)

**ILLINOIS:** Wayne County's new McClosky pool has five excellent new producers, one with an estimated production of nearly 10,000 bbl. daily. With one new pool opened and two more in prospect, this county is rapidly becoming the most active area in the Illinois basin. A good well in Hamilton County has opened a new pool with at least two pay zones. (p. 60)

**PENNSYLVANIA:** A deep test on the Washington anticline in Greene County to go to the Lower Devonian at around 7,200 ft. was started. (p. 79)

**KANSAS:** Two pools were opened in Russell County and one in Barton County near the new Pawnee Rock pool west of the Barton arch. (p. 69)

**OKLAHOMA:** New pools were showing from the widespread wildcat campaign and production was noticeably turning up for the state as a whole. (p. 53)

**TEXAS GULF COAST:** Exploration along the Wilcox trend picked up as a result of the uncovering of lower sands and new deep tests were starting. (p. 78)

**MISSISSIPPI:** A new basal Eutaw horizon showed 48 gravity oil on a drill stem test at the north edge of the Tinsley field, the highest gravity oil yet tested in the field. (p. 81)

**SOUTHWEST TEXAS:** Activity generally was up and several wildcats were showing for pool openers, extensions to old fields or new sand discoveries (p. 73).

**WEST TEXAS:** Another deep Ordovician pool was opened 20 miles south and east of the old Big Lake field in Reagan County, the first deep Ordovician pool in the region. It is located on a block of 24,000 acres held almost entirely by Amerada Petroleum Co., and extensive development is expected since much of the acreage is on State University lands where a certain amount of development is required (p. 70).

## COMPLETIONS IN ALL FIELDS . . .

(Week Ended August 2, 1941)

| | Oil | Gas | Dry | Total | 1941 total comp. to date* | 1940 total comp. to date* |
|---|---|---|---|---|---|---|
| N. Y., Pa. and W. Va. | 92 | 22 | 3 | 117 | 3,417 | 3,172 |
| Ohio | 8 | 13 | 13 | 34 | 944 | 895 |
| Kentucky | 8 | 8 | 5 | 21 | 376 | 292 |
| Michigan | 7 | 3 | 8 | 18 | 492 | 707 |
| Indiana | 10 | 1 | 6 | 17 | 298 | 203 |
| Illinois | 55 | 2 | 29 | 86 | 1,910 | 2,198 |
| Kansas | 39 | 4 | 10 | 53 | 1,234 | 1,078 |
| Nebraska | 0 | 0 | 0 | 0 | 55 | 14 |
| Missouri, Iowa | 0 | 0 | 4 | 4 | 25 | 25 |
| Oklahoma | 32 | 2 | 20 | 54 | 1,066 | 1,110 |
| Texas: | | | | | | |
| North Central Texas | 40 | 1 | 22 | 63 | 1,630 | 1,766 |
| West Texas | 53 | 0 | 4 | 57 | 1,242 | 1,191 |
| Texas Panhandle | 19 | 0 | 2 | 21 | 343 | 351 |
| Eastern Texas | 14 | 5 | 0 | 19 | 638 | 333 |
| Texas Gulf Coast | 21 | 0 | 6 | 27 | 626 | 758 |
| Southwest Texas | 20 | 3 | 8 | 31 | 1,050 | 1,376 |
| Total Texas | 167 | 9 | 42 | 218 | 5,529 | 5,775 |
| North Louisiana | 7 | 4 | 0 | 11 | 380 | 360 |
| Louisiana Gulf Coast | 10 | 1 | 4 | 15 | 515 | 653 |
| Total Louisiana | 17 | 5 | 4 | 26 | 895 | 1,013 |
| Arkansas | 1 | 0 | 2 | 3 | 106 | 97 |
| Mississippi and Southeast | 3 | 0 | 3 | 6 | 145 | 126 |
| Montana | 4 | 0 | 3 | 7 | 156 | 113 |
| Wyoming | 2 | 0 | 1 | 3 | 103 | 90 |
| Colorado, Utah | 0 | 0 | 0 | 0 | 22 | 10 |
| New Mexico | 3 | 0 | 4 | 7 | 175 | 429 |
| California | 20 | 0 | 5 | 25 | 653 | 630 |
| Total United States | 468 | 69 | 162 | 699 | 17,601 | 17,987 |
| Total previous week | 443 | 55 | 149 | 647 | | |
| Week ended Aug. 3, 1940 | 429 | 24 | 157 | 610 | | |

# Deep Test at Buena Vista Hills, Calif. Plugs Back

By L. P. STOCKMAN

LOS ANGELES, Calif., Aug. 2.—Honolulu Oil Corp. has plugged back its 25-P, a deep test on the Buena Vista Hills anticline in 10-32s-24e, from 14,622 ft. to 11,093 ft. and is testing the interval between 8,500 and 11,093 ft. before concluding work. This deep test, located in Kern County, California, encountered mechanical trouble while drilling ahead at 14,622 ft. and a satisfactory recovery could not be effected despite an extended fishing job. The fish in the bottom of the hole precluded deeper drilling without whipstocking. Orders were finally issued to stop fishing operations and proceed with plugging operations but to test gas showings logged higher in the hole. This well can be considered a conclusive deep test as far as concerns the Honolulu anticline, which comprises the eastern end of the Buena Vista Hills. It is logical to assume that deeper tests will be drilled on this major structure at some future date but the outcome of Honolulu's deep test will undoubtedly retard such operations.

Unless commercial production is developed in the upper part of the hole, as a result of the series of tests now being made, finis will soon be written to this attempt to find deep production on the Buena Vista Hills anticline and this action will remove one of the most promising structures from the list of fields having deep-zone possibilities in the Miocene. It has been generally recognized for a number of years that deeper production of oil and gas might be anticipated in the Miocene at favorable structural locations on the Buena Vista Hills anticline but the failure of Honolulu's well to find the pay has proved this expectation to be erroneous. Two structures, Kettleman Hills and Buena Vista Hills, stood out for years as potential oil fields with closure and formations favorable for the accumulation of oil and gas.

### Depths and Formations Penetrated

Although Honolulu 25-P failed to find the equivalent of the Vedder zone down to 14,622 ft. it is questionable whether another few hundred feet of hole would have changed the status. Formation in the bottom of the hole where the drill pipe stuck was a very hard sand with little porosity and with little or no production possibilities. In addition to this unfavorable condition the formation was showing 55° dips. One of the most important factors, in addition to the mechanical problem that developed, in decision to abandon the lower part of the hole is the questionable economic advisability under present conditions of attempting to produce a zone below 14,000 ft. The deepest producing interval at present is 13,153 ft. in the Wasco field where, because of high drilling costs and stringent curtailment the payout cannot be less than 5 years. The advisability of prospecting and subsequently developing a deep zone is open to question and requires, in addition to large capital investments, an oil sand of sufficient thickness, porosity and permeability to produce at least 75,000 bbl. per acre on the basis of one well to 10-acre spacing.

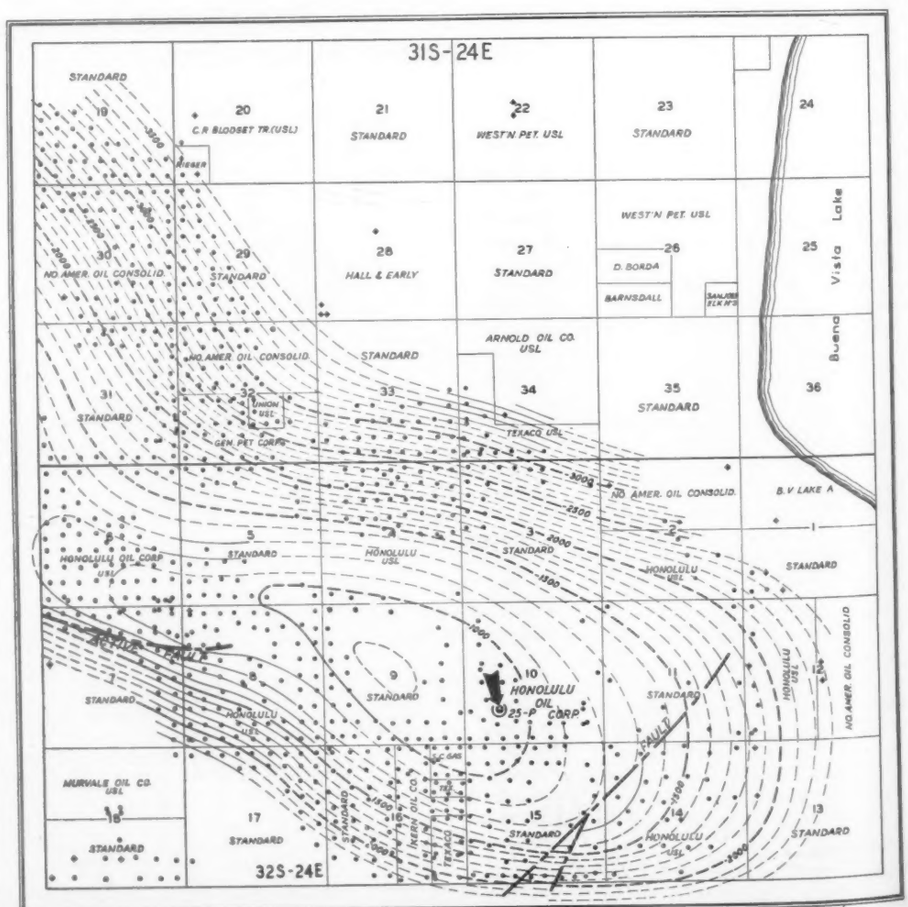
When the drill pipe in Honolulu 25-P froze on bottom at 14,622 ft the company, failing to regain circulation, shot the pipe at 12,880 ft. and pulled the joints above that point. The next step was to plug back to 11,093 ft. and cement 5,760 ft. of blank 8⅝-in. casing. Previously 11¾-in. surface pipe had been cemented at 3,101 ft. The company has now run in 496 ft. of blank 6⅝-in. liner and cemented it at 8,593 ft. with 200 sacks of cement. The interval now to be tested is below the probable equivalent of the Stevens formation that is productive in Ten Section and other similar fields in the San Joaquin Valley and above the Vedder equivalent which was not found in penetrating to 14,622 ft. This well, when it was started, was expected to find the Valvulineria robusta, middle Miocene, at about 7,500 ft., base of the Temblor, middle Miocene, at about 9,000 ft. and base of the Vaqueros, lower Miocene, at approximately 10,000 ft.

### Miocene Unexpectedly Thick

Instead of finding subsurface formations as had been anticipated the company found a substantial thickening of the upper and middle Miocene. The well's log shows the Scalez beds at 2,292 ft. and top of the Maricopa brown shale at 4,000 ft. Characteristic bentonite, a volcanic ash, was found at 6,565 ft. and at 6,881 ft. a brown shale with streaks of oil-stained sand was logged. This is believed to be the equivalent of the Stevens oil zone which, if such is the case, means that the Buena Vista Hills was running substantially higher than the same zone at Ten Section, Canal, Greeley and other similar San Joaquin Valley fields. At 7,575 ft. the formation consisted of a brown shale with tight gray sand that showed gas. A core taken at 10,296 ft. showed the formation to be a shale with streaks of silt and at 12,948 ft. the formation was definitely Santos shale of middle Miocene age. At 13,392 ft. in a black Santos silty shale the well showed considerable gas and high pressure. The well was still in Santos shale at 13,905 ft. where the last core was taken but is believed to have been in a sand when drilling operations were concluded on the basis of returns in the drilling mud. Although Honolulu failed to develop deep production in its Buena Vista Hills anticline, subsequent drilling in other sections of the field may prove more favorable in which event, because of its large holdings, it will participate in future development.

### Historical Data

The large gas wells completed in the eastern end of the Buena Vista Hills field soon after discovery resulted in numerous advancements in control work. The first started when Honolulu's discovery well blew in and ran wild for several months. At this time J. A. (Jake) Pollard from Texas secured a contract with Honolulu officials to undertake control work on the wild gas well. Pollard brought in a rotary rig from Texas and brought the well under control. This was in 1909 and the rotary rig used by Pollard was one of the first used in California. As far as is known, Pollard's use of mud for control work in killing a gas well marked a new development as it is the first recorded use of mud for control work with rotary tools in California. In addition to mud, Pollard employed barnyard manure and other fibrous material such as hay and grain.




*Contours based on upper Scalez zone on the Honolulu anticline in the Buena Vista Hills field of Kern County, California, showing high structural position of Honolulu's 25-P, deep well which was drilled to 14,622 ft. and is now being tested after failing to find Vedder zone of Miocene age*

# New Production More Than Offsets Decline Trend

By ROBERT INGRAM

ONE of the most active drilling campaigns in Oklahoma in many a day during the past 3 months by last week had brought in enough new oil that operators, for the first time in over a year, were straining against proration allowables. The agitation was almost imperceptible, but it was there. Before the state Corporation Commission fixed the August allowable at 415,000 bbl. a day for the whole state, the Daily Oklahoman sent up a trial balloon, pointing out that the state had been able to make the increased allowable in July and suggested another increase for August "just to see what will happen."

At a conference preceding the commission hearing, producers and refiners also opposed the proration order covering both August and September since they felt the general oil situation was subject to quick changes. The commission agreed, held the order to cover only August, but made no increase in the daily allowable.

Considered by the commission in its refusal to increase the allowable was the fact that one of the most important new areas—the Guthrie pool in Logan County—was being held down because of a rapid decline in reservoir pressure. In spite of the fact that several new wells were added during July, operators in the pool asked that the field's allowable be reduced from 3,600 bbl. to 3,000 bbl. during August. This would reduce the per-well allowable to 150 bbl. a day.

Starting off with a per-well quota of 400 bbl., the operators cut back to 300 bbl. on July 1. On July 17, they voluntarily reduced runs to 200 bbl. a day in order to slow down the decline in pressure. Field reports indicated that the pressure had dropped about 150 lb. a month before that. In June the field averaged 3,389 bbl. daily, and average natural gas at that time was estimated at 500,000 cu. ft. That pressure was declining did not mean, however, that operators would be content to hold their wells down indefinitely. Instead they were drawing up a contract for construction of a gas-repressuring plant to be started at once.

The drop in production at Guthrie, however, was more than offset by the five new fields brought under proration—East Tecumseh with 1,050 bbl.; North Little River-Hunton, 200 bbl.; South Dill, 600 bbl.; East Cromwell-Hunton, 900 bbl., and West Bethel, 150 bbl. The Pawhuska zone of the Oklahoma City field which made 432 bbl. a day in June, was removed from prorated status.

### Transportation Tangle Holds Hobart Production Down

Another complication in the production picture arose in the southwestern part of the state where operators have been playing for important new production for the past several months. Shortage of rail tank cars was likely to curb production in the Hobart field of Kiowa County, a 1939 discovery which has grown rapidly in importance. C. C. Cummings, operator of a gathering system in the field, requested at the prehearing conference with Corporation Commission officials (see above) that the field's allowable be given an increase from the present 4,200 bbl. It was brought out at the meeting, however, that there already has been some delay in getting cars spotted regularly at the Hobart loading rack, and that the railroads can give no assurance of immediate placing of cars in the future.

The allowable was left unchanged, with Cummings accounting for 2,000 bbl. of the 4,200 bbl. to Stanolind-Sunray, and 1,800 bbl. to the Omar Refining Co. of Garber and the balance of the field's output taken by Phillips Petroleum Co. handling its own oil.

### Binger Dome to Get Another Deep Test

The old Binger dome in Caddo County, opened by a spectacular and moderately successful deep test drilled in 1934 by the Denver Producing & Refining Co., is to be tested again. Denver was rigging up last week at Sah-Cam, SE SE 33-10-10w, west of the discovery well and lone producer, and was apt to drill to a new world's record depth of 15,000 ft. in an attempt to fathom the secrets of the Anadarko basin.

The Sah-Cam was spudded in March 1934, tested at several zones, and on March 3, 1935, was bottomed at 10,084 ft. Failing to make a producer at that depth, a removable plug was set in the pipe with whipstock at 7,900 ft. and the hole drilled out to 8,300 ft. to test a sand. The well made some oil, but not enough to be classed as a commercial producer and it was capped. The discovery well, 1 Adah-Noe, NW SW SW 34-10-10w, was plugged back from a total depth of 11,230 ft. to around 9,800 ft. and has been flowing at various rates, making about 75 bbl. a day by heads at present.

## SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Cement | 1 | 20 | 3,572 |
| East Cromwell | 2 | 2,604 | 7,664 |
| Cumberland | 2 | 659 | 10,140 |
| West Earlsboro | 3 | 413 | 13,337 |
| West Hewitt | 2 | 578 | 4,255 |
| St. Louis and North | 2 | 304 | 7,966 |
| East Stroud | 2 | 205 | 7,031 |
| Other fields | 15 | 639 | 26,049 |
| Wildcats | 3 | 245 | 11,055 |
| Gas wells: Fields | 2 | *4.6 | 4,155 |
| Dry holes: Fields | 10 | ..... | 27,833 |
| Wildcats | 10 | ..... | 25,496 |
| Total | 54 | ..... | 148,553 |
| Recompletions | 6 | 1,442 | ..... |

*Million cu. ft.

## OKLAHOMA COMPLETIONS

### Wildcats

T. N. Berry 1 fee ..... NW NE SW 13-18-3
Flower 167 bbl. through 13/64-in. choke on tubing, bottom hole pressure 1,570 lb., second Wilcox 4,100 ft., T. D. 4,013½ ft., *opens Rattlesnake or North Mehan pool*, Payne County.

Shelton 1 Armstrong ..... SE SE NE 3-11-10
Pumped 35 bbl. in 10 hr., lime 3,313-32 ft., 7-in. 3,309 ft., perf. 3,325-30 ft. and 3,121-38 ft., Booch 2,728 ft., Gilcrease 2,970 ft., T.D. 3,380 ft., *pool opener*, Okfuskee County.

Jones 1 Schutts ..... NW SW SE 11-10-8
Flowed 43 bbl. in 24 hr., 35 gravity, Gilcrease 3,276 ft., 5-in. 3,327 ft., T.D. 3,572 ft., P.B. 3,386 ft., shot 3,348-85 ft., *pool opener*, Okfuskee County.

C. F. Carter 1 Shull ..... SE SW NE 20-6s-18e
Dry, T.D. 915 ft., 6-in. 865 ft., Choctaw County.

Cowley & Smiddy 1 White ..... NE NE NW 29-4-6
Dry, T. D. 945 ft., Pontotoc County.

Gardner 1-A Cahill ..... E½ NE SW 2-6-8
Dry, T.D. 1,358 ft., sand 1,250 ft. and 1,310 ft., Hughes County.

McIntyre 1 Hanning ..... SW SW SE 2-9-7
Dry, T.D. 3,650 ft., Cromwell 3,641 ft., Seminole County.

Vierson 1 Harper ..... NW NW NE 16-13-7
Dry, T.D. 4,210½ ft., Hunton 4,039 ft., Sylvan 4,065 ft., Okfuskee County.

Henry 1-A Schultz ..... NE SW NE 29-23-1w
Dry, T.D. 2,525 ft., Pawhuska 2,147 ft., Hoover 2,206 ft., Oread 2,507 ft., Noble County.

Gulf 1 Skillings ..... NE NW 8-23-4w
Dry, T.D. 6,339 ft., second Wilcox 6,153-6,277 ft., Garfield County.

Revels 1 Wolf ..... NW SW 8-1-2
Dry, T.D. 2,496 ft., base Permian and top Simpson 2,289 ft., Murray County.

Alma 1 Ringer ..... NW NW 2-3-3
Dry, T.D. 2,260 ft., Simpson 1,940 ft., Garvin County.

Rucker 1 Foster ..... NE NE SE 17-9-2w
Dry, T.D. 798 ft., Cleveland County.

### Fields

West Arno, Creek County: Wilcox 1 Sootkey, SE SW SW 26-14-7, flowed 50 bbl., Bartlesville 3,157-76 ft., 5-in. 3,615 ft., shot 3,163-80 ft., T.D. 3,615 ft.

North Bebee, Pottawatomie County: Oils 4 Walker, SE SE SW 9-5-5, 50 bbl., Hunton 2,182-2,465 ft., T.D. 2,465 ft.

Cement, Caddo County: Pace 2 Prentice, NW NW SW 6-5-9w, pumped 20 bbl., 20 per cent water, Noble-Olson sand 3,345-62 ft., 5-in. 3,420 ft., perf. 3,340-60 ft., squeezed, T.D. 3,572 ft.

Comanche, Stephens County: Armor 7 Wade, N½ SW NE 11-2s-8w, pumped 4 bbl., sand 1,512-25 ft., 5-in. 1,512 ft., T.D. 1,525 ft.

East Cromwell, Okfuskee County: Foundation 1 Brown, NW NW NE 35-11-8, flowed 1,035 bbl., Cromwell 3,407 ft., 7-in. 3,411 ft., C.P. 700 lb., T.D. 3,417 ft.

Shell 1-A Curry B, SE SW SW 26-11-8, pumped 1,569 bbl. oil and 110 bbl. water in 21 hr. through tubing, Hunton 4,024-45 ft., T.D. 4,247 ft., P.B. 4,158 ft.

Cumberland, Marshall County: Pure 1 Thompson 108, SW NE NE 28-5s-7e, flowed 485 bbl. by heads in 20½ hr., through casing, cut 2 per cent mud, Bromide 4,648 ft., first sand 4,946 ft., second sand 5,039 ft., 7-in. 4,937 ft., T.D. 5,070 ft.

Pure 7 Little 106, SW NW NW 34-5s-7e, flowed 174 bbl. through 1-in. choke, first zone 4,814 ft., second zone 4,924 ft., third zone 5,051 ft., 7-in. 4,865 ft., T.D. 5,070 ft.

West Earlsboro, Seminole County: Mudge 1 Hollingsworth B, NW SE SW 24-9-4, flowed 139 bbl. through ¼-in. choke, Hunton 4,186 ft., perf. 4,184-4,203 ft., acid, T.D. 4,397 ft.

Mid-Continent 1 Krouch, NW NE SE 26-9-4 ,flowed 194 bbl. oil and 15 bbl. water, Hunton 4,242 ft., 7-in. 4,425 ft., perf. 4,242-69 ft., acid, T.D. 4,435 ft.

Wood 1 Billington B, SE NW NE 26-9-4, pumped 80 bbl. oil and 300 bbl. water, Hunton 4,249 ft., perf. 4,247-83 ft., 5-in. 4,290 ft., acid, T.D. 4,505 ft.

Fish, Seminole County: Mid-Continent 7 Ferguson, NW SW SW 18-7-8, pumped 35 bbl. oil and 30 bbl. water, Calvin 1,504 ft., shot 1,514-19 ft., T.D. 1,519 ft.

Fuhrman, Hughes County: Royer 1 McKinney, NE SW NW 35-9-9, dry, T.D. 2,101 ft., sand 2,096 ft.

West Hewitt, Carter County: Kyle 10 Daugherty, SE SW 17-4s-2w, pumped 65 bbl., sand 2,121 ft., 7-in. 2,070 ft., shot 2,105-22 ft., T.D. 2,122 ft.

Gibson 9 Harrell A, SE SW NW 20-4s-2w, flowed 513 bbl., 7-in. 2,133 ft., perf. 2,018-2,112 ft., T.D. 2,133 ft.

Hewitt, Carter County: Carter 11 Vorhees, NW NW SW 21-4s-2w, pumped 185 bbl. oil and 48 bbl. water, 5-in. 2,277 ft., perf. 2,181-97 ft., T.D. 2,323 ft.

Isom Springs, Marshall County: Gill 1 Adams, SW NE NE 6-8s-6e, pumped 59 bbl., sand 537-38 ft., 7-in. 533 ft., T.D. 538 ft.

Mason, Okfuskee County: Texas 1 Montgomery, S½ SE NE 16-12-9, dry, T.D. 3,804 ft., Misener 3,788 ft., Hunton 3,789 ft.

Milroy, Stephens County: R. E. Eby 12 Harley, SE NE NE 24-2s-4w, pumped 11 bbl., 7-in. 273 ft., T.D. 416 ft.

Okemah, Okfuskee County: Snyder 5 Berryhill, S½ SE NW 35-11-9, pumped 10 bbl., sand 1,470-1,500 ft., shot, T.D. 1,500 ft.

Seminole, Seminole County: Mid-Continent 8 Tayeche, NW SE SW 24-9-6, dry, T.D. 2,458 ft., Calvin 2,412 ft.

St. Louis, Pottawatomie County: Clark 1 Standridge, SE SE SW 10-7-4, flowed 108 bbl., Hunton 3,765 ft., Sylvan 4,024 ft., T.D. 4,025 ft., P.B. 4,000 ft., acid.

North St. Louis, Pottawatomie County: Amerada 1 Whitehead, SW SE SE 27-8-4, flowed 196 bbl. through ⅝-in. choke, Hunton 3,863 ft., 7-in. 3,867 ft., acid, T.D. 3,941 ft.

East Stroud, Creek County: Shell 1 Bunyard, NE NE SE 31-15-7, 26 bbl., Prue 2,834-44 ft., T.D. 4,115 ft., P.B. 4,014 ft.

Shell 10 Jones, SW SW SW 32-15-7, 179 bbl., Prue 2,874-94 ft., T.D. 2,916 ft.

Tussy, Garvin County: Cox-Hamon 5 Partons, SW NE SE 29-1-3w, pumped 44 bbl., 7-in. 2,572 ft., T.D. 3,281 ft., P.B. 2,815 ft.

Cox-Hamon 9 Partons, NW NE SE 29-1-3w, dry, T.D. 2,774 ft. in black shale.

Velma, Stephens County: Winkler 1-A Coulston, NE SE SE 28-1s-5w, dry, T.D. 2,540 ft., 5-in. 2,094 ft., P.B. 2,109 ft., ½ bbl. oil a day.

Weleetka, Okfuskee County: Doak-Hughes 1 Kirk, NE SE NE 21-10-11, dry, T.D. 2,917 ft., Wapanucka 2,762 ft., Cromwell 2,915-17 ft.

Smith 1 Douglass, SW NW NE 23-10-11w, dry, T.D. 2,536 ft., sand 2,500 ft.

Wewoka Townsite, Seminole County: Patterson 1 Horton, NE NE SW 19-8-8, dry, T.D. 3,305 ft.

### Miscellaneous

Creek County: Bruin 1 Cruce, NE NE SE 28-14-10, flowed 90 bbl., Simpson 3,254 ft., Wilcox 3,269 ft., shot 3,253-77 ft., T.D. 3,277 ft.

Indo 2-A Koch, SW SW NE 18-17-11, dry, T.D. 2,872 ft.

Sinclair Prairie 26 Berryhill, NE SW NW 16-17-12, 28 bbl., Glen sand 1,556 ft., T.D. 1,564 ft., P.B. 1,556 ft.

McIntosh County: Rebold 1-A Warner, NE NE NE 11-12-16, 600,000 cu. ft. gas, Dutcher 2,090-96 ft., T.D. 2,113 ft.

Okmulgee County: Wood Oil 2 Palmer, SE NE NW 13-12-12, 4,000,000 cu. ft. gas, Dutcher 2,032 ft., T.D. 2,042 ft.

Stone Hill 1-A Landrey, SW NW NW 8-13-14, dry, T.D. 2,677 ft.

Anthony 1-B Lewis, NE NW SW 6-14-15, 7 bbl., sand 683 ft., T.D. 701 ft.

Osage County: Blackwell 13 Osage, NE SW SW 3-28-11, 40 bbl., sand 905-50 ft., T.D. 956 ft.

Wah-Shah-She Oil 50 Osage, NE SE SE 15-29-9, 2 bbl., sand 1,482-1,515 ft., T.D. 1,515 ft.

Pontotoc County: Joe Josephson 1-A McCurry, SW SW NW 15-4-6, pumped 24 bbl. oil and 10 bbl. water, sandy lime 836 ft., broken sand 840-67 ft., shot 848-64 ft., T.D. 867 ft.

## WILDCAT DRILLING REPORT

### Panhandle

Beaver County: Laughlin 1 fee, W½ SE 13-6n-21ecm, drilling 2,245 ft.

### Southwestern

Atoka County: Matson 2 Rowland, SW NE NE 18-3s-10e, broken sand, light show oil 668-80 ft., lime 680-82 ft., drilling shale 705 ft.

Beckham County: H. C. McLaughlin 1 Stain, SW SW 25-8-25w, dolomite 1,844 ft., show gas 1,944-68 ft. and 1,988-95 ft., show oil 2,075-80 ft., water 2,080-86 ft., drilling 2,100 ft.

Caddo County: Texas 2 Smith, SE NW 2-5-12w, D.S. test 3,388 ft., flowed 125 bbl. in 55 min. from Simpson Bromide blew out between 7-in. and 13⅜-in. casing from Hunton, est. 25,000,000 cu. ft. gas, gas killed, lost swedge and milling tools in hole at 2,218 ft., set whipstock at 1,998 ft., milled down in old hole to 2,011 ft., P.B. 1,973 ft., T.D. 3,410 ft.

Cleveland County: Sinclair Prairie 1 Craig, NE NE SE

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30-8-1w, second Wilcox 7,625 ft., cored green shale, 4 ft. fine stained sand and 6 ft. coarse sand with stain and odor 7,620-36 ft., electrical log, 7-in. 7,629 ft., perf. 6,719-23 ft., bailing fluid 3,500 ft. from top, no show reported.

Johnston County: Baldwin & Reed 1 Davis, S½ SW NW 8-2s-8e, show oil in Viola 1,640-50 ft., Bromide 1,900 ft., sand 2,570-76½ ft., salt and sulfur water, pulling 7-in. casing to P.B. to test Viola.

Kiowa County: Mathews-Lewis 1 Brazell, NE NE NE NE 33-7-17w, Arbuckle 940 ft., light staining 940-1,040 ft. and 1,040-44 ft., 900 ft. salt water, T.D. 1,044 ft., P.B. 1,028 ft., acid, bailed dry, S.D.

Kelly Wells 1-A Oster, SW NE NW 33-7-17w, free oil 774-81 ft., increase 798-99 ft., run bailer five times, recovered 5 gal. oil per run, set 6-in., acidized 777-803 ft., no results, drilling Simpson shale 882 ft.

Love County: Magnolia 1 Wilson, SW SE NW 12-7s-2e, sand 4,197 ft., cored sandy shale odor gas, dip 2° 4,202-17 ft., D.S. test 4,199 ft., recovered drilling mud, Sycamore 4,244 ft., cored lime, light stain 4,243-53 ft., cored brown lime and shale 4,253-63 ft., D.S. test 4,247 ft., recovered drilling fluid, cored lime with show free oil 4,362-73 ft., 60° dip, cored hard gray lime with free oil, salty taste 4,288-98 ft., cored lime with free oil 4,298-4,308 ft., 55° dip, to core ahead.

Batson 1 Walden, NE NW NW 34-6s-2e, T.D. 2,703 ft., 7-in. 2,169 ft., Viola 2,425-75 ft., perf. 1,741-53 ft., squeezed 100 sacks, run tubing with packer at 2,150 ft., acid, swabbing 2 bbl. an hr., T.D. 2,595 ft.

Joe Baldwin 1 Hill, NW NW SE 26-8s-2e, drilling 5,096 ft. in Strawn.

Stephens County: E. R. Perkins 1 State, NE NE NW 16-3s-8w, spud 60 ft., to be 5,000-ft. test.

**North and Central**

Creek County: Williams 1 Steinman, NE NW NW 17-16-10, S.D. 2,320 ft.

Charles Balph 1 Starr, SE SE SW 7-15-8, Avant 745 ft., Belle City 930 ft., Hogshooter 1,270 ft., Layton 1,430 ft., Cleveland 1,710 ft., drilling 3,730 ft.

Grant County: Champlin 1-A Crouse, S½ SE SW 29-25-8w, Tonkawa 4,570 ft., all sands carried water, drilling 4,670 ft.

Kay County: Zephyr 1 Gingerich, SW SW SE 29-28-1w, cored gilsonitic sand and green sandy shale 3,592-97 ft., dry, T.D. 3,679 ft.

Alexander & Hauke 1-A Kreger, SE SE NE 4-25-2w, old T.D. 3,705 ft., Oswego 3,950 ft., Mississippi chat 4,355 ft., T.D. 4,487 ft., shot drill pipe at 4,400 ft. and pulled it, S.D., may skid rig for new hole.

Deep Rock 1 Midgley, NW NW SE 33-28-4, first report.

Lincoln County: Allied Materials 1 Hicks, NW NW NW 25-13-6, first Wilcox 4,272 ft., second Wilcox 4,299 ft., cored white salt sand 4,306-12 ft., electrical log, 6-in. 4,306 ft., perf. 4,219-47 ft., acid, gaged 431,000 cut. ft. fas with some show oil, 1,575 lb. R.P., to test Hunton at 4,078 ft.

Dunnett 1 Luckenbill, SW SE SE 29-15-5, Oswego 3,475 ft., Prue 3,504 ft., show oil, 7-in. 3,502 ft., est. 60-65 bbl. a day, T.D. 3,548 ft., filled up 1,200 ft. oil in hole natural, shot 3,520-45 ft., cleaned out with 1,800 ft. oil in hole, deepened to 3,550 ft., water, P.B. 3,548 ft., flowed 40 bbl. oil in 15 hr. by heads through tubing, flowed 35 bbl. a day and trace water.

Dunnett 1 Brown, NW NW SW 17-15-4, Oswego 3,914 ft., Prue 3,979 ft., some show oil 4,020-25 ft. and 4,035-55 ft., Verdigris 4,060 ft., Skinner 4,125 ft., Bartlesville zone 4,264 ft., brown lime 4,460 ft., cored sand, some show oil 3,982-92 ft., electrical log, drilling 4,570 ft.

Kemp 1 McLowry, SE SE SW 28-17-2, old well deepened, old T.D. 4,002 ft. in second Wilcox, 5½-in. 3,996 ft., gas broke in between 5½-in. and surface pipe, shut off casing 2,650 ft., circulating.

Okfuskee County: Walker & Sexton 1 Hilderbrandt, NW NE NE 19-10-11, S.D. 1,152 ft., no show.

Wilcox 1 Moseley-Nevins, SE SE NW 4-13-7, Oswego 2,675 ft., Prue 2,680 ft., Skinner 2,860 ft., Red Fork 3,060 ft., brown lime 3,369 ft., cored 2,682-96 ft., recovered sandy shale, cored dry sandy shale 2,696-2,713 ft., cored sand with odor and sandy shale 3,064-79 ft.

Shell 1 Palmer, SW NW SW 6-10-9, Woodford 3,857 ft., Hunton 3,882 ft., Sylvan 4,024 ft., Viola 4,098 ft., dense 4,130 ft., dolomite 4,137 ft., first Wilcox 4,150-52 ft., dry, second Wilcox 4,185 ft., D.S. test 3,905-4,012 ft., recovered 360 ft. oil and gas-cut mud, cored dolomite and shale 4,168-82 ft., T.D. 4,215 ft., electrical log, 4½-in. 4,185 ft.

Shell 1 Heffner, SE NW NE 17-11-9, 8⅝-in. 195 ft.

W. C. McBride 1 Long, SE SE SW 17-12-10, first report.

Oklahoma County: Harper-Turner 1 Kunc, NW SW NW 33-14-2w, drilling 5,796 ft.

Osage County: Black Jack I Osage, NE NE SW 29-25-7, drilling 1,920 ft.

Devonian 1-A Osage, SW SW NE 34-22-7, 10-in. 1,223 ft., drilling 1,263 ft.

Swartz 3-A Osage, SW SW NE 16-23-9, 6-in. 1,589 ft., Oswego 1,798-1,873 ft., Bartlesville 2,156 ft., T.D. 2,170 ft., filled up 160 ft. oil, natural, est. 6 bbl. natural, to shoot.

Ohio-Osage 1 Osage, E½ E½ NW 32-22-9, 8-in. 667 ft., 6-in. 1,990 ft., Bartlesville 2,238 ft., T.D. 2,250 ft. in sand, 4,250,000 cu. ft. gas, S.D.

Norbia 1 Osage, SW SW NE 9-26-5, 10-in. 1,748 ft., drilling 2,135 ft.

Herman Madvine 1 Osage, NW NW SW 14-22-10, sandy shale 1,873 ft., water sand 1,883-91 ft., installing pumping unit.

Anderson-Prichard 14 Osage, SW NE SW 32-28-8, 8-in. 550 ft., drilling 2,025 ft.

Pontotoc County: Cason 1 Adcock, SE NW NE 21-4-6, T.D. 945 ft., S.D., may deepen.

Pottawatomie County: Stanolind-Amerada 1 Rowan, NE NW SW 20-9-4, Misener 4,703 ft., some show oil, Hunton 4,705 ft., Viola 4,872 ft., dense 4,930 ft., dolomite 4,965 ft., first Wilcox 5,014 ft., cored 5,026-5,162 ft., electrical log, 5½-in. 4,836 ft., to test Hunton.

North American 1 Airhart, NE NE SW 5-9-4, Calvin 4,000 ft., Earlsboro 4,520 ft., unconformity 4,595 ft., Mississippian Caney 4,630 ft., Hunton 4,995 ft., Viola 5,127 ft., first Wilcox 5,240 ft., S.D. 5,264 ft.

Seminole County: Modav Drilling 1 Whitney, NE NE SE 30-7-7, T.D. 1,200 ft., recemented surface pipe.

Hall-Jordan 1 Jennings, SE SE 8-8-8, basal Calvin 1,555 ft., Senora lime 1,905 ft., brown lime 2,845 ft., Booch 2,990 ft., Gilcrease 3,132 ft., Cromwell 3,265 ft., electrical log at 3,299 ft., drilling 3,768 ft.

## NORTH LOUISIANA, ARKANSAS

# *Wilcox Play Pushes North With New Gas Strike*

By GEORGE WEBER

SHREVEPORT, La., Aug. 4.—The Wilcox play resulted in its first discovery outside La Salle Parish last week, as Big West Drilling Co. established gas production in 1 Lowe, 36-12n-3e, Caldwell Parish. The operators had been testing and reworking the wildcat test for over a week, in an attempt to find oil production.

The 1 Lowe was bottomed at 4,009 ft., with 5½-in. casing at 2,850 ft. Perforations at 2,754-59 ft. showed about 15,000,000 cu. ft. of gas and much salt water, and were squeezed. Later perforations at 2,754-59 ft. and 2,596-2,602 ft. also showed gas, and after squeezing, operators shot final perforations at 2,210-15 ft. with 10 shots and the well flowed an estimated 15,000,000 cu. ft. with a casing pressure of 800 lb. per sq. in. This level is 600 ft. below the top of the Wilcox formation. The discovery is of limited importance unless it leads to oil production, for little immediate use is seen for the gas, excepting for drilling fuel in possible nearby tests.

### New Tests Added to Exploration Campaign

Meanwhile, several new wildcats began in the Wilcox area, to bring exploration to a new peak. H. L. Hunt is beginning three tests in Catahoula, Grant and Madison parishes, and a total of nine other wildcats are active in the six parishes included in the current play.

In West Carroll Parish, the R. H. Crowe 1 Bruce Lumber Co. is at critical depth, in the top of the Smackover formation. The formation was topped at 5,960 ft. which is about 188 ft. higher than it was found in a wildcat drilled 11 miles to the southwest. At latest reports the wildcat was coring below 6,060 ft. in sand, which is present in the formation in that region. No reported shows had been encountered.

Claiborne Parish is emerging as the most important wildcat area in North Louisiana with four deep tests now under way. Big West Drilling Co. is below 6,200 ft. in 1 Alford, 3 miles northeast of Lisbon, and Crow Drilling Co. 1 O'Bannon has drilled through the massive anhydrite and is making hole below 3,994 ft. Hunt Oil Co. is preparing to spud 1 Mitchiner, east of Haynesville in western Claiborne Parish, and Union Producing Co. is rigged up on 1 McDonald, 1½ miles southwest of the same operator's 1-A Meadows which opened the first Smackover lime production in North Louisiana, at the North Lisbon gas-condensate pool. Since all of the wildcats in Claiborne Parish are directed to the Cotton Valley or deeper formations, none has yet approached critical depth.

### LOUISIANA COMPLETIONS

**Fields**

Bellevue, Bossier Parish: Premier Inv. Co. 53 Wyche, NE NW NW 14-19-11, pumped 25 bbl., T.D. 399 ft., 7-in. casing 278 ft., Nacatoch.

Sligo, Bossier Parish: Triangle Drlg. Co. 3-A Murff unit, SE SE 18-17-11, pumped 70 bbl., T.D. 3,139 ft., 5½-in. casing 3,124 ft., Glen Rose porous lime 3,134-39 ft.

Caddo, Caddo Parish: Magnolia Pet. Co. 32 Dean-Thigpen, NE SE SE 6-20-15, pumped 55 bbl., T.D. 1,547 ft., 6⅝-in. casing 1,352 ft., 4,000 gal. acid, Chalk rock.

Olla, La Salle Parish: Placid Oil Co. 99 La. Central, NE NW 1-9-2, 400 bbl., 31 per cent salt water, ¼-in. choke, T.P. 200 lb., C.P. 456 lb., T.D. 2,437 ft., 7-in. casing 2,437 ft., perf. 2,194-2,200 ft., Wilcox.

Placid Oil Co. 101 La. Central, SE SE 3-9-2, 175 bbl., 5 per cent salt water, 18/64-in. choke, T.P. 150 lb., C.P. 400 lb., T.D. 2,446 ft., 7-in. casing 2,446 ft., perf. 2,058-76 ft., Wilcox.

Placid Oil Co. 1-A Tallifero, SE NE 26-10-2, 150 bbl., 4 per cent salt water, 12/64-in. choke, T.D. 2,377 ft., 7-in. casing 2,372 ft., perf. 2,220-30 ft., Wilcox.

Walter, La Salle Parish: Carter Oil Co. et al 2 La. Delta, NW SE 12-6n-4e, 189 bbl., 7 per cent salt water, 11/64-in. choke, T.P. 425 lb., C.P. 600 lb., T.D. 5,257 ft., 7-in. casing 4,809 ft., perf. 4,751-55 ft., Wilcox.

Monroe, Union Parish: Interstate Nat. Gas Co. 108 fee, NW NW 36-21n-3e, 1,116,000 cu. ft. gas, T.D. 2,153 ft., 6-in. casing 2,088 ft., R.P. 692 lb., gas rock.

Interstate Nat. Gas Co. 109 fee, NE SE 1-21-3, 3,363,000 cu. ft. gas, R.P. 975 lb., T.D. 2,188 ft., 6-in. casing 2,130 ft. gas rock.

### SUMMARY OF COMPLETIONS

***North Louisiana***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Bellevue | 1 | 25 | 399 |
| Sligo | 1 | 70 | 3,139 |
| Caddo | 1 | 55 | 1,547 |
| Olla | 3 | 586 | 7,260 |
| Walters | 1 | 178 | 5,257 |
| Gas wells: Monroe | 4 | *6.2 | 8,671 |
| Total | 11 | ..... | 26,273 |

***Arkansas***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Troy | 1 | 35 | 2,188 |
| Dry holes: El Dorado | 1 | ..... | 2,253 |
| Smackover | 1 | ..... | 2,690 |
| Total | 3 | 35 | 7,131 |

*Million cu. ft.

N. & W. Corp. 1 Gladney, NW NE 2-21-3, 556,000 cu. ft., R.P. 885 lb., T.D. 2,165 ft., 7-in. casing 2,085 ft., gas rock.

Nemours Corp. 2 Edwards, SE NW SW 2-21-3e, 1,172,000 cu. ft., R.P. 900 lb., T.D. 2,165 ft., 6-in. casing 2,106 ft.

### NORTH LOUISIANA WILDCATS

Bienville Parish: R. E. Collins et al 1 Madden heirs, SW SW SE 3-16-8, surface casing.

Caldwell Parish: Big West Drlg. Co. 1-A Lowe, SE SE 36-12n-3e, tested 15,000,000 cu. ft. gas, C.P. 800 lb., 2,210-15 ft., testing.

Southern Carbon Co. 1 Howard, SW SE 13-14n-4e, drilling sand and shale 2,016 ft.

Catahoula Parish: O. C. Borah 1 Womack, 54-9n-5e, S.D. 2,535 ft.

Carter Oil Co. et al 1-B Tensas Delta Land Co., NE SE 15-5n-5e, S.D. 5,216 ft., repair pump.

H. L. Hunt 2-A La. Central, NW SE 9-9n-6e, spudded.

Claiborne Parish: Big West Drlg. Co. 1 Alford, C W½ 11-21-4w, coring 6,147 ft.

Crow Drlg. Co. 1 O'Bannon, NW 30-22n-4w, drilling 4,225 ft.

Hunt Oil Co. 1 Mitchiner, NE SW SW 15-23-7, spudding.

Union Producing Co. 1 McDonald unit, SW NE SW 13-21-5w, rig.

De Soto Parish: J. E. Stock et al 1 Cook, NW NE 32-13-14, S.D. 2,890 ft.

Franklin Parish: Grubb & Hawkins 1 Campbell, SE NE 1-11n-7e, drilling 1,430 ft.

S. J. Ryan 1 Womble, NW NW NW 11-12n-8e, S.D. 4,510 ft.

Grant Parish: H. L. Hunt 1-F Goodpine, NW NW 12-8-2w, drilling 50 ft.

E. F. Neely 1 McAdams, NE SE 19-6n-2e, surface casing.

La Salle Parish: Aden Oil Co. 1 Grey, NE NE 36-8n-2e, drilling 1,500 ft.

Scruggs & Todd 1 Pipes, NW NE 19-8n-3e, coring 3,160 ft.

Natchitoches Parish: E. H. Demetrio 1 Winn, SE NW 25-10-10, rig.

W. A. Jacobson et al 1 Leopold Plantation, SW SE SE 33-11-9w, S.D. 50 ft.

Rhodes & O'Mara 1 Prudential Life Ins., NE SE 36-11-10, drilling shale 5,697 ft.

Sabine Parish: Roy Raines 1 C. Carter, 27-9-11, S.D. 3,485 ft.

West Carroll Parish: R. W. Crowe, trustee 1 Bruce Lumber Co., SE 16-21-9e, coring 6,070 ft.

### NEW NORTH LOUISIANA WILDCAT TESTS

Madison Parish: H. L. Hunt 3 Ayers, NE SE 18-15n-10e, set 210 ft. surface casing, W.O.C.

Sabine Parish: J. H. Trotter (formerly Plummer & McDaniels) 1 Phares, NW NW SW 4-5-12, old well drilled deeper, tested salt water, show gas, 2,298-2,305 ft.

## West Extension to McKamie Completed Structurally High

The Carter Oil Co. will shortly complete 1 Hanes, located in 25-17-24, for a westward extension to the McKamie field of Lafayette County. The test topped the Smackover lime at —8,891 ft. subsea, 52 ft. higher than in the 1 Cornelius, a recent edge completion, and the main porosity in the lime formation was topped at —8,961 ft. subsea, 79 ft. higher than in the 1 Cornelius, and 124 ft. above the estimated water level.

Development of the newly opened Macedonia area east of the Dorcheat field in Columbia County is ex-

*(Continued on Page 67)*

# Two Indiana Tests Showing; Clayton, Ohio, Gets Big Well

By STAFF CORRESPONDENT

EVANSVILLE, Ind., Aug. 4.—Cherry & Kidd 1 H. C. Ford, SE SW NW 34-4s-13w, prospective pool opener in Posey County, was put on pump late last week to test McClosky production. After the McClosky pay at 2,976-86 ft. was acidized with 2,500 gal. earlier in the week, the well swabbed continuously through casing at the rate of 7½ bbl. an hour. Production estimates are not yet obtainable, however, as the test is now reported to be making some water.

Another Posey County wildcat, Central States 1 Breeze, NW SW SW 19-6s-12w, was being completed last week in the Tar Springs, a new pay zone for the area. Production estimates so far have been variable and no reliable information is available. No. 1 Breeze is about 1 mile west of production in the Caborn field. The operators of 1 Breeze, meanwhile, have moved one location south and spudded a new Tar Springs test.

A prospective pool opener in Posey County, Martin et al 1 Harlem-Wolf, SE SE SW 22-7s-15w, was reported dry and abandoned last week. Rosiclare saturation at 2,795 ft. was considered noncommercial after producing only 15 bbl. of oil and 30 bbl. of water daily. A slight show was also recovered in the Aux Vases at 2,748-68 ft. Total depth of the well was 2,952 ft.

### INDIANA COMPLETIONS

**Wildcats**

Gibson County: Warren & Bradshaw 1 Reavis, SW NW NE 24-2s-10w, dry at 2,407 ft., Glen Dean 1,358 ft., Ste. Genevieve 1,821 ft., St. Louis 2,045 ft.

Posey County: Martin et al 1 Harlem-Wolf, SE SE SW 22-7s-15w, dry at 2,909 ft., Glen Dean 2,249 ft., Ste. Genevieve 2,280 ft.

Rossi et al 1 Sanders, NE SE NW 26-6s-13w, dry at 2,458 ft.

Randolph County: Unionport Gas 1 Starbuck, SE SE SE 4-19n-13e, 300,000 cu. ft. gas, 80-qt. shot 1,024-66 ft., T.D. 1,078 ft.

Kniff et al 1 Clark, NW NE NW 16-19n-13e, dry at 385 ft.

Spencer County: Hedges et al 1 Eble, SE NW NW 7-7s-7w, pumped 35 bbl. oil and 15 bbl. water, natural, pay 1,029-53 ft., T.D. 1,056 ft., *Pool opener.*

Starke County: J. L. Black et al 1 Kennedy, NW SW NE 26-33n-2w, dry at 1,160 ft.

**Fields**

Cannelburg, Daviess County: J. W. Cannon 1 Walker, N½ SE SE NE 5-2n-5w, pumped 5 bbl. oil and 2 bbl. water, 20-qt. shot 578-84 ft., T.D. 592 ft., P.B. 587 ft.

East Calvin, Posey County: Tide Water 12 Doll, NW SW NW SE 33-3s-14w, pumped 160 bbl. oil and 10 bbl. water, 1,500 gal. acid 2,879-94 ft., T.D. 2,894 ft.

Continental 9 Kleiderer A, SW SE SW NE 33-3s-14w, pumped 200 bbl., 3,000 gal. acid 2,844-95 ft., T.D. 2,896 ft.

Griffin, Gibson County: Hall-Edwards 47 Maier, SE SW SW 12-3s-14w, dry at 2,887 ft., Glen Dean 2,252 ft., Ste. Genevieve 2,802 ft.

South Griffin, Gibson County: Continental 46 Bozeman, NW NW SW 23-3s-14w, pumped 210 bbl., natural, sand 2,155-67 ft., T.D. 2,167 ft.

South Griffin, Posey County: Superior 30 New Harmony, SW SE SW 34-4s-14w, pumped 290 bbl., 1,000 gal. acid, pay 2,884-88 ft., T.D. 2,911 ft.

Ed Holmans 4 Mumford, NW SW NE 32-3s-13w, pumped 27 bbl., 40-qt. shot 2,730-41 ft., T.D. 2,949 ft., P.B. 2,745 ft.

Vanderburg, Vanderburg County: Vanderburg Oil 10 Hornby, SE NE SE 32-5s-10w, pumped 15 bbl. oil and 8 bbl. water, 80-qt. shot 884-935 ft., T.D. 935 ft.

Veale, Daviess County: Hargarco 8 Gaither, NW NE SW 21-2n-7w, 8,000 cu. ft. gas and 10 bbl. oil, natural, sand 945-1,009 ft., T.D. 1,009 ft.

Hargarco 9 Gaither, NW SW NE SW 21-2n-7w, pumped 25 bbl., 40-qt. shot 930-43 ft., Barlow 845 ft., T.D. 948 ft.

### INDIANA DRILLING REPORT

Crawford County: Reece-Dietz et al 1 Esarey, NE NW NE 36-3s-1w, drilling 1,150 ft.

Daviess County: Hartman et al 1 White, SW NW SW 22-2n-7w, drilling 2,004 ft.

Swartzentruber et al 1 Beck, SE SW NE 8-2n-5w, drilling 499 ft.

D. L. Norris et al 1 Adams, NE SE SW 35-2n-5w, first report, spud.

Elkhart County: M. C. Fletcher 1 Baughn, NE SE SE 13-38n-4e, Trenton 1,887 ft., show oil and gas 1,887-89 ft., 5-in. 1,889 ft., H.F.W. and S.D. 1,917 ft.

A. W. Downs 1 Garl estate, NE SW SE 11-38n-4e, set 5-in. 618 ft., Devonian 648 ft., S.D. 655 ft.

John H. McLean 1 Brandt, NW NW SW 30-37n-7w, first report, 8-in. 209 ft., shale 540 ft., drilling 565 ft.

Greene County: Ohio Oil 1 O. P. Wells, N½ NW SE 2-7n-4w, Barlow 32 ft., Ste. Genevieve 196 ft., St. Louis 285 ft., 8-in. 443 ft., drilling 445 ft.

Gibson County: H. D. Brown 1 Watts, SW SW NW 29-2s-12w, drilling 1,250 ft.

R. N. Sylvester 1 Potts, NW SW SE 24-1n-10w, set 10-in. 847 ft., drilling 990 ft.

Schneider & Quinn 1 Schmidt, E½ SW SW 13-3s-9w, first report, 10-in. 146 ft., 250,000 cu. ft. gas 355-59 ft., drilling 480 ft.

R. D. Brown 1 Bailey, NW NW SE 10-2s-9w, first report, 10-in. 110 ft., drilling 790 ft.

Harrison County: Ind. Pub. Utilities 1 Mounds, NE NE NE 6-3s-4e, S.D. 201 ft.

A. E. Winning 1 Miller, SE SW SW 5-2s-4e, S.D. 500 ft.

Knox County: Midwest Dev. 1 Schaller, SE SE SE 23-2n-11w, Ste. Genevieve 1,793 ft., McClosky 1,877 ft., slight show oil 1,898-1,901 ft., S.D. 1,901 ft.

La Porte County: John E. Short 1 Sahley, W½ NW SE NE 33-36n-1w, rigging up machine.

W. A. Anderson 1 Rodman, NE SW 32-36n-1w, location, first report.

Newton County: Palmer Corp. 1 Henkle, SE SE SE 36-30n-9w, first report, old well drilling deeper from 485 ft., 6-in. 485 ft., drilling 690 ft.

Orange County: U. S. Oil 1 Willyard, SW NW NE SW 33-1n-1w, S.D. 965 ft.

Posey County: Joe Dawson et al 1 Aldrich, SE SW SE 36-5s-15w, Glen Dean 2,494 ft., Barlow 2,699 ft., Aux Vases 2,969 ft., show oil 2,975-79 ft., 2,995-3,001 ft., drilling 3,035 ft.

Central States 1 Breeze, SW SW SW 19-6s-12w, base Pennsylvanian 1,606 ft., Waltersburg 1,882 ft., Tar Springs 1,970 ft., drill-stem test 1,680-90 ft., recovered 65 ft., oil and 60 ft. mud, 7-in. 1,980 ft., waiting on cement.

Rossi et al 1 Seifert, NW NW SE 19-6s-12w, pumped 52 bbl. in 16 hr. and pumped off, 20-qt. shot 2,375-85 ft., T.D. 2,385 ft.

Herndon Drlg. et al 1 Ford, SE NE NE 6-4s-13w, set 10-in. 118 ft., drilling 1,935 ft.

Cherry & Kidd et al 1 Ford, SE SW NW 34-4s-13w, 1-hr. drill-stem test 2,972-78 ft., recovered 800 ft. oil and 60 ft. mud, T.D. 3,110 ft., waiting on cement.

Charles Loveless et al 1 Dauswan, NE NW NE 27-6s-13w, location, first report.

Basin Drlg. 1 Hell, NW SW NE 12-7s-12w, first report, drilling 1,000 ft.

Randolph County: David Culpepper 1 Lewis, SW SE SW 4-19n-13e, S.D. 1,330 ft.

Spencer County: Jesse Wilson et al 1 McCoy, NE NE NE 12-7s-8w, lost cable-tool hole at 703 ft., skidded 10 ft. south, will drill with rotary.

Goldsmith et al 1 Eisler, SW SE 6-7s-7w, location, first report.

Troy Refining et al 1 Huffman, NW SE SE 11-7s-7w, location, first report.

Sullivan County: E. M. Self 1 James Land, NE NE NE 36-7n-9w, S.D. 1,402 ft.

Vigo County: Krauss-Ricketts et al 1 Hollenbeck, SW NE 14-10n-8w, first report, rigging up machine.

## SUMMARY OF COMPLETIONS

*Indiana*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells | 10 | 927 | 18,357 |
| Gas wells | 1 | ..... | 1,078 |
| Dry holes | 6 | ..... | 11,846 |
| Total | 17 | ..... | 31,281 |

*Ohio*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells | 8 | 576 | 13,725 |
| Gas wells | 13 | *4.4 | 21,232 |
| Dry holes | 13 | ..... | 24,179 |
| Total | 34 | ..... | 59,136 |

*Eastern Kentucky*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells | 5 | 28 | 4,360 |
| Gas wells | 8 | *3.6 | 21,874 |
| Total | 13 | ..... | 26,234 |

*Western Kentucky*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells | 3 | 520 | 2,429 |
| Dry holes | 5 | ..... | 4,940 |
| Total | 8 | ..... | 7,369 |

*Million cu. ft.

## OHIO

NEWARK, Ohio, Aug. 4.—The Clayton pool, Perry County, continues to lead in the Ohio oil development with the completion of a 333-bbl. producer, the largest yet to be completed in the pool. The area also yields 175-bbl. and 40-bbl. wells.

The Medina shows oil in a Licking County test 4 miles southwest of Newark. The James McCloy 1 Ralph Adams, Union Township, topped the Medina at 2,346 ft. and was drilled to 2,364 ft., shot, made 2 bbl. of oil a day, testing. The Clinton sand in this test was dry.

Promising gas tests in Ashland and Knox counties were failures. Medina and Monroe counties yield fair gassers.

In Noble County, John T. Galey et al apparently topped the Onondaga lime at 4,510 ft. in the test on the Jacob Ullman heirs farm in NE Section 21, Elk Township. This places it 3,807 ft. subsea or at the expected depth.

**Ashland County**

Mohican Township: Ohio Fuel 1 C. Raubenolt, Sec. 33, dry, Clinton, T.D. 3,047 ft.

Sullivan Township: Ohio Fuel 1 A. B. Pettit, Lot 20 dry, Clinton, T.D. 2,912 ft.

**Athens County**

Canaan Township: Ohio Fuel 1 John Dwyer, Sec. 4, 40,000 cu. ft. gas, second Berea, shot, T.D. 1,622 ft.

Carthage Township: Cromwell et al 1 Lillie Milliron, at Guysville Sec. 18, 150,000 cu. ft. gas, first Berea, T.D. 1,722 ft.

**Guernsey County**

Knox Township: George Jewell 1 Edward Ratliffe, Sec. 2, dry, no Gordon sand, T.D. 1,815 ft.

**Hocking County**

Ward Township: Ohio Fuel 199 Sunday Creek Coal, Sec. 10, 520,000 cu. ft. gas, Berea, T.D. 1,139 ft.

**Holmes County**

Killbuck Township: A. F. Bryan et al 1 Clifford Croskey, Sec. 9, 70,000 cu. ft. gas, Berea, T.D. 608 ft.

**Jefferson County**

Cross Creek Township: R. J. Braden 1 C. P. Hutterly, SE Sec. 6, ½ bbl., Berea sand, T.D. 1,582 ft.

Saline Township: C. S. Kelly et al 6 Etta Barnhouse heirs, SW Sec. 29, dry, Berea, T.D. 1,282 ft.

Wells Township: Ed. Wells & Co. 1 fee, Sec. 17, dry, Berea, T.D. 1,610 ft.

**Knox County**

Howard Township: Knox Exploration 1 T. C. Kemp, first quarter, dry, Clinton, T.D. 2,800 ft.

Pike Township: H. E. Perkins 1 C. C. Harris, no Clinton sand, dry, T.D. 2,805 ft.

**Lawrence County**

Windsor Township: Ohio Fuel 1 Forgey & Templeton, Sec. 33, 200,000 cu. ft. gas, shot, Ohio shales, T.D. 2,480 ft.

**Licking County**

Madison Township: Ohio Fuel 1 C. J. Merrill, second quarter, 940,000 cu. ft. gas, Clinton, T.D. 2,637 ft.

Mary Ann Township: Armbruster & Stricker 5 J. R. Davis, fourth quarter, 10 bbl., shot, Berea, T.D. 645 ft.

Guy T. Shrider et al 5 J. R. Davis, Sec. 8, 10 bbl., Berea, T.D. 644 ft.

Strum Oil 1 Harriett Newlon, fourth quarter, 6 bbl., shot, Berea, T.D. 734 ft.

Newton Township: E. J. Edmonds 1 C. C. Jeffries, fourth quarter, dry, Berea, T.D. 560 ft.

**Lorain County**

Pittsfield Township: Ohio Fuel 2 John E. Coley, Lot 121, dry, Clinton, T.D. 2,348 ft.

**Medina County**

Hinckley Township: Harry Dempsey 1 Charles Porter, Lot 52, 1,000,000 cu. ft. gas, shot, Clinton, T.D. 3,573 ft.

Litchfield Township: Preston Oil 1 L. Broadsword, Lot 15, dry, Berea, T.D. 470 ft.

**Meigs County**

Rutland Township: Guy Swadley et al 2 fee, 200,000 cu. ft., salt sand, T.D. 738 ft.

H. M. Nelson 2 Eli O. Wood, Sec. 22, dry, Maxon (water), T.D. 943 ft.

**Monroe County**

Franklin Township: Leonard Hines et al 1 Philip Stoffle, Sec. 1, 1,000,000 cu. ft. gas, lime, T.D. 1,103 ft.

**Morgan County**

Marion Township: W. S. Harris 1 M. M. Doan, Lot 1, dry, Brill (water), T.D. 1,024 ft.

Penn Township: Penn Cont. Co. 1 J. R. McInturf, Sec. 9, 50,000 cu. ft. gas, shot, second Berea, T.D. 1,387 ft.

**Noble County**

Marion Township: H. G. Clymer et al 1 F. H. Danford, Sec. 2, 50,000 cu. ft., shot, Berea, T.D. 1,624 ft.

**Perry County**

Clayton Township: Preston Oil 2 William Thomoson, Sec. 8, 333 bbl., shot, 320 lb. gelatin, Clinton 3,268-3,316 ft., T.D. 3,325 ft.

Preston Oil 5 A. C. Randolph, Sec. 5, 40 bbl., shot, Clinton, T.D. 3,253 ft.

Industrial Gas 2 T. D. Rhoades, Sec. 5, 175 bbl., shot, Clinton, T.D. 3,342 ft.

Thorn Township: Davis, Gordon et al 1 Charles Packer, E½ Sec. 10, dry, Clinton sand, T.D. 2,610 ft.

**Washington County**

Aurelius Township: Peaker et al 1 I. Delong, Sec. 17, 1 bbl., shot, Buel Run sand, T.D. 200 ft.

Barlow Township: Campbell et al 1 J. M. Vickers, Sec. 2, 70,000 cu. ft. gas, Squaw, T.D. 1,539 ft.

Ohio Fuel 6 Hiram Tresch, Sec. 2, 150,000 cu. ft. gas, salt sand, T.D. 1,153 ft.

## EASTERN KENTUCKY

ASHLAND, Ky., Aug. 4.—Completions hold the

*(Continued on Page 68)*

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PROCESSES ENGINEERING PERCO RESEARCH CONSTRUCTION

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OF

## PHILLIPS PETROLEUM COMPANY

BARTLESVILLE, OKLAHOMA

# Four New Pools Are Showing After Wildcat Campaign

By R. MARNE SANFORD

WICHITA FALLS, Tex., Aug. 4.—Young, Wilbarger, Clay and Jack counties monopolized activity here this week. As a result of the past few weeks of intensive wildcat drilling a new pool was opened, two tests were showing for discoveries, a second pay zone was opened for an established field and another field was given a small extension.

The new Marble Falls pool was opened in south central Young County by Dorian & Mitchell 1 Daniels, southwest corner of Block 421, T.E.&L. Survey, 2 miles east of Newcastle. The well flowed 200 bbl. in 10 hours and was estimated good for 300 to 350 bbl. of oil daily.

## SUMMARY OF COMPLETIONS

*North Texas*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil: Fargo | 2 | 1,450 | 8,082 |
| K.M.A. | 11 | 4,435 | 42,393 |
| Olney | 2 | 8 | 1,426 |
| Other fields | 5 | 1,460 | 18,708 |
| Miscellaneous pools | 14 | 1,554 | 30,191 |
| Wildcats | 2 | 333 | 4,760 |
| Dry: Olney | 3 | ..... | 2,613 |
| Other fields | 1 | ..... | 1,689 |
| Miscellaneous pools | 8 | ..... | 12,934 |
| Wildcats | 6 | ..... | 8,678 |
| Total | 54 | ..... | 127,474 |

*West Central Texas*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil: Buff Creek | 2 | 87 | 3,071 |
| Other fields | 1 | 2 | 622 |
| Wildcats | 1 | 250 | 3,245 |
| Gas: Fields | 1 | *1.5 | 1,560 |
| Dry: Miscellaneous pools | 1 | ..... | 2,145 |
| Wildcats | 3 | ..... | 4,315 |
| Total | 9 | ..... | 14,958 |

*Million cu. ft.

Casing was perforated with 36 shots from 4,408 to 4,435 ft. in the Marble Falls section of the basal Pennsylvanian. Immediately the hole filled with 1,000 ft. of oil and when opened flowed into pits and cleaned itself in 1 hour. The wildcat was drilled to the Ellenburger, lower Ordovician, lime at 4,935 ft., total depth, but neither the Ellenburger nor the Mississippi lime above it showed for production so the hole was plugged back to 4,500 ft. to test the Marble Falls lime. A west offset has already been staked by the operators as 2 Kate Grigsby, in the southeast corner of Block 416, T.E.&L. Survey.

One-quarter mile northwest, the same operators last April completed 1 Kate Grigsby, Section 416, T.E.&L. Survey, from the Caddo lime. The well flowed 52 bbl. of oil in 3 hours on official gage from the lime at 3,974-88 ft.

### Second Pay Zone Opened at New Young County Pool

A second pay zone for Young County's newest Caddo lime pool, 3 miles southwest of Graham, was assured at the close of the week by Walter H. Gant 1 Lowery, a south-edge test. The well, located in the northeast part of S. H. Criswell Survey, missed the area's regular Caddo section and was completed in the lower Marble Falls section. It flowed 300 bbl. of oil in 21 hours for completion, making the tenth well in the new pool.

### Two Wildcats Are Testing Oil Shows

In eastern Wilbarger County the possibility of a new Ellenburger lime oil pool was indicated by the Waggoner estate 33 fee, Section 14, Block 13, H.&T.C. Survey. The test cored from 2,991-3,008 ft. and recovered 8 ft. of saturated Ellenburger lime. At last reports the test was bottomed at 2,010 ft. and operators were cementing 5½-in. casing at 3,008 ft.

At the end of the week L. T. Burns was running 7-in. casing to test 1 C. L. Wynn, Block 34, H. Williams Survey, a 4,000-ft. failure which has been deepened to test the Mississippi lime of southern Clay County, 2 miles west of Joy. The Mississippi was topped at 5,891 ft. and saturated lime drilled from 5,898 to 5,949 ft., with total depth at 5,967 ft. On a 30-minute drill-stem test in the saturated zone, 150 ft. of oil-cut mud was recovered.

### Myers Pool Extended in New Pay Zone

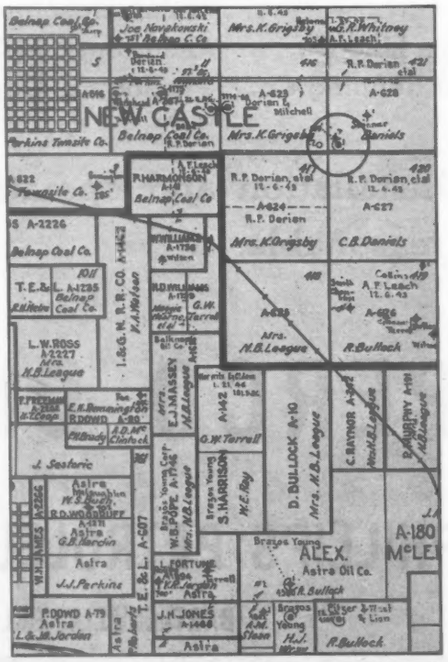
A ¼-mile-east extension and a new pay zone was in prospect for the Myers-Strawn sand pool, 7½ miles northwest of Jacksboro in Jack County. Bob Emory 1 Mary A. Myers, in the F. N. Rudmose Survey, drilled a sand from 2,385-95 ft., total depth. Casing was set on top of the sand and when the plug was drilled the hole filled 1,800 ft. with oil in 3 hours. Operator is testing.

This pay section does not correspond with any logged by the discovery well, Hanlon-Buchanan 1 Myers, ¼ mile west, which opened the area in March 1938. The discovery found shows at 356-64 ft., 2,454-59 ft., 2,711-17 ft. and the pay section from 3,432-40 ft., total depth, and was completed for 250 bbl. daily.

## NORTH TEXAS COMPLETIONS

### Wildcats

Archer County: Young & Woody Drlg. Co. 1 Abercrombie, 150 ft. from N and 1,500 ft. from W lines Sec. 57 in Harris Subd. of Club Ranch, dry at 1,420 ft.
Fain-McGaha 1 Weinzapfel, Sec. 22, Blk. 4, Clark & Plumb Sur., dry at 1,170 ft.
S. W. Snoddy 1 Carter, Sec. 38, Blk. 5, Clark & Plumb Sur., 3 bbl. in 24 hr., pumping natural, perf. casing 815-21 ft., P. B. from 1,125 ft.
Clay County: Seitz, Comegys & Seitz 1 Dunn, R. R. Brown Sur., A-14, dry at 2,391 ft.
Cooke County: E. L. Wilson 1 Gywn, 330 ft. from S and SW lines H. Jennings Sur., A-531, dry at 1,505 ft.
Kingery Bros. 1 Wimmer, 150 ft. from N and E lines of lease, approx. 900 ft. from S and 150 ft. from E lines B.B.B.&C. Sur. A-163, dry at 1,602 ft.
Wichita County: Magnolia 79 Burnett D, old well drilled deeper, Sec. 6, H.&T.B. Sur. A-428, old T.D. 1,926 ft., 108 bbl. in 3 hr., ¾-in. choke, est. 330 bbl. daily, 6,000 gal. acid, top Ellenburger 3,627 ft., pay 3,627-35 ft.
W. A. Buttram 1 Ferguson, 768 ft. from N and 150 ft. from E lines L. W. Smith Sur. A-882, dry at 590 ft.




Heydrick Map Co., Wichita Falls

*Opening a new Marble Falls lime field for Young County, Dorian & Mitchell 1 Daniels, SW cor. Section 421, T.E.&L. Survey, circled above, just east of Newcastle, has been estimated at 300 to 350 bbl. daily. It is about ¼ mile southwest of the same operator's Caddo lime discovery of several months ago*

### Fields

Bryson, Jack County: Harper & Knappenberger 2 Shoun, 315 bbl. in 24 hr., ½-in. choke, 3,030-41 ft.
Coleman, Archer County: Shell 2 Coleman A, 362 bbl. in 5 hr., 4,000 gal. acid, est. 750 bbl. daily, 5,143-75 ft., T.D. 5,200 ft.
Fargo, Wilbarger County: Amerada 3 Dodson, 116 bbl. in 3 hr., ½-in. choke, est. 700 bbl. daily, 4,032-62 ft.
Humble 2 McCaleb, 130 bbl. in 3 hr., ¼-in. choke, est. 750 bbl. daily, 4,005-20 ft.
Harrold, Wilbarger County: C. H. Kadane and J. N. Fidel 1 Orr, 175 bbl. oil and 26 bbl. water in 24 hr., pumping natural, 3,306-15 ft., P.B. from 4,412 ft.
Hull-Silk, Archer County: Phillips 8 Little "Novella," dry at 1,689 ft.
Guy Brown 2 Perkins E, 20 bbl. in 24 hr., pumping natural, 1,020-34 ft.
K.M.A., Wichita County: Hanlon-Buchanan, Inc., 13 Fassett & Tuttle B, 150 bbl. in 24 hr., pumping and flowing, 180-qt. shot, 3,000 gal. acid, 3,940-76 ft.
Geo. B. Ray 3 Waggoner B, 44 bbl. in 3 hr., ¾-in. choke, est. 280 bbl. daily, 35-qt. shot, 3,762-80 ft.
Geo. B. Ray 4 Waggoner B, 38 bbl. in 3 hr., ¾-in. choke, est. 200 bbl. daily, top K.M.A. 3,754 ft., pay 3,769-75 ft.
Mid-Union Drlg. Co. 9 Fassett & Tuttle, 35 bbl. in 3 hr., ¾-in. choke, est. 175 bbl. daily, 150-qt. shot, 4,022-56 ft.
Hammon, Hanlon-Buchanan 51 Fassett & Tuttle, 61 bbl. in 3 hr., ¾-in. choke, est. 300 bbl. daily, 70-qt. shot, 3,985-4,009 ft., P.B. from 4,012 ft.
Granite Oil Trust 7 Martin, 54 bbl. in 3 hr., 30/64-in. choke, est. 200 bbl. daily, 210-qt. shot, 3,737-3,855 ft.
Lincoln & Moore 5 Bradley, 65 bbl. in 3 hr., 24/64-in. choke, est. 300 bbl. daily, 3,735-85 ft., T.D. 3,858 ft.
Buffalo Oil & Gas 4-Ellb. Ferguson, 149 bbl. in 2 hr., ¾-in. choke, est. 850 bbl. daily, 3,000 gal. acid, 4,233-51 ft., T.D. 4,305 ft.
Coppock & Coleman 7 Warren, 80 bbl. in 24 hr., pumping natural, 1,754-56 ft.
Fain-McGaha 2-Ellb. Griffin, 81 bbl. in 1¼ hr., ½-in. choke, est. 700 bbl. daily, top Ellenburger 4,319 ft., pay 4,320-78 ft.
Shell 25-Ellb. Griffin, 333 bbl. in 3 hr., ¾-in. choke, est. 1,200 bbl. daily, 4,228-57 ft., T.D. 4,342 ft.
Olney, Young County: Sams & Prideaux 8 Prideaux, dry at 665 ft.
W. F. Palmer 3 Marshall B, dry at 967 ft.
Pemeta Oil 11 Swain, 2 bbl. in 24 hr., pumping natural, 709-14 ft.
W. R. Stafford 1 Wolverton, dry at 981 ft.
D. P. Holland 1 Morris, 6 bbl. in 24 hr., pumping natural, 702-12 ft.
Walnut Bend, Cooke County: Sinclair Prairie 5 Atkins, 80 bbl. in 4 hr., natural, est. 200 bbl. daily, 4,923-33 ft., T.D. 5,021 ft.

### Miscellaneous Pools

Archer County: British American 1 Albright, dry at 4,849 ft.
C. C. Winfrey 1 Andrews, dry at 1,041 ft.
Pet. Prod. 16 King, 38 bbl. in 24 hr., pumping natural, 1,226-38 ft.
Morgan & Turner 9 Carr, 44 bbl. in 24 hr., pumping natural, 1,412-20 ft.
Clay County: John C. Murphree 1 Byers, dry at 1,220 ft.
C. Y. Gorman 4 Taylor, 58 bbl. in 24 hr., pumping natural, 1,102-17 ft.
Perkins & Cullum 12 Taylor A, 22 bbl. in 3 hr., pumping natural, est. 110 bbl. daily, 1,045-57 ft.
Geo. Golden 2 Myers, dry at 1,222 ft.
Stayton Oil 13 McGregor, 21 bbl. in 24 hr., pumping natural, 1,178-89 ft.
Stayton Oil 16 McGregor, 63 bbl. in 24 hr., pumping natural, 1,141-67 ft.
Cooke County: Thos. Nix 4 Flusche, 17 bbl. in 24 hr., pumping natural, 790-802 ft.
Throckmorton County: A. J. Bradford 1 McKelchen, dry at 649 ft.
A. J. Bradford 3 McKelchen, dry at 662 ft.
Wichita County: Fisher & Dudley 13 Warren, junked at 1,640 ft.
Underwood Oil 4 Stine, 75 bbl. in 24 hr., pumping natural, pay 1,295-96 ft., 1,301-16 ft.
Underwood Oil 5 Stine, 85 bbl. in 24 hr., pumping natural, 1,296-1,310 ft.
Akin, Dimock & Costley 1 Roller, dry at 1,651 ft.
Wilbarger County: Paradise Oil 6-A Waggoner A, 80 bbl. in 24 hr., 10-qt. shot, 1,877-93 ft.
Young County: Shell 1 Bloodworth A, 88 bbl. oil and 27 bbl. water in 24 hr., 9,300 gal. acid, perf. casing 4,850-4,913 ft., top Mississippi 4,843 ft., Ellenburger 5,038 ft., T.D. 5,100 ft., semiwildcat in Larimore field.
L. T. Burns 1 Allison, 90 bbl. in 3 hr., 16/64-in. choke, est. 400 bbl. daily, 3,000 gal. acid, 4,876-4,910 ft.
King Oil 9 Daniels, 70 bbl. in 5 hr., ½-in. choke, est. 150 bbl. daily, top Caddo 4,148 ft., Mississippi 4,835 ft., pay 4,850-4,896 ft.
Fagadau, Panhandle & Rankin 1 Harlan, 278 bbl. in 17 hr., ¾-in. choke, est. 325 bbl. daily, 2,760-76 ft.

### NORTH TEXAS ACTIVE WILDCATS

Archer County: W. B. Hamilton 22 Cartwright, 660 ft. from W and S lines James Webb Sur. A-664, T.D. 5,211 ft., P.B. 5,164 ft., still testing.
Ted Norwood 1 Wright, 150 ft. from N and W lines Sec. 2435, T.E.&L. Sur., 1,500-ft. test, drilling 600 ft.
Clay County: Bridwell Oil 1 Myers (old well drilling deeper), Charleton Thompson Sur. A-444, old T.D. 6,065 ft., prep. to deepen.

L. T. Burns 1 Hodges, 330 ft. from S and 1,320 ft. from W lines Sec. 64, J. H. Belcher Sur., 6,000-ft. rotary test, pits.

L. T. Burns 2 Wynn, 1,400 ft. from N and 467 ft. from E lines Sec. 34, John Rogers Sur. A-310, 6,000-ft. rotary test, first report.

Royal Pet. 1 Hatfield, 440 ft. from S and E lines W. G. Glass Sur., 6,000-ft. rotary test, drilling 4,465 ft.

Superior Oil 1 Seigler, 467 ft. from S and E lines of W 120 acres Sec. 3211, T.E.&L. Sur., 5,600-ft. rotary test, drilled 2,629 ft.

Cooke County: C. J. Bohner 1 Wickliff, 330 ft. S and W of NE cor. S 40.45 acres of W 80.9 acres of E 182.69 acres Israel Gable Sur. A-420, S.D. 3,352 ft., orders.

Dickson Oil and R. B. George 1 R. B. George, 330 ft. from NE NW E 40 acres R. B. George farm, Jas. Bradshaw Sur. A-29, drilling 4,089 ft.

Burk Royalty Co. (prev. reported John Gray) 1 Ware, 330 ft. E of A. C. C. Bailey Sur. A-44, 2,300-ft. test, moving in material.

Paul Stevenson 1 J. T. Donald, 650 ft. NE and 2,050 ft. NW E cor. J. Coffey Sur. A-1545, but in T. B. Hardwick Sur. A-1599, 3,000-ft. rotary test, drilling 155 ft.

Denton County: D. S. Hager 1 O. A. Koenig, 1,492 ft. from E and 457 ft. from S lines B. F. Perry Sur. A-277, 2,000-ft. rotary test, drilling 1,893 ft.

Jack County: Alma Oil 1 Maxey, V. W. Maxey Sur., pumping 25 bbl. oil in 24 hr., will acidize later.

Hill & Hill 1 Kinder, 467 ft. from E and 150 ft. from S lines B.S.&F. Sur. A-2351, 2,300-ft. cable-tool test, S.D. 2,453 ft., orders.

F. Kirk Johnson 1 E. J. Shawyer, 660 ft. from S and 520 ft. from E lines NW SE J. Turner Sur A-609, 5,500-ft. test, underreaming 8-in. casing to 3,018 ft., prep. to drill ahead.

Magnolia 1 Borden, 1,000 ft. from N and 500 ft. from W lines W. R. Smith Sur. A-547, Ellenburger test, first report.

O. J. Perrin 1 Brumbelow, 1,045 ft. from S and 720 ft. from E lines H. C. Ayers Sur A-4, drilling 5,260 ft.

Ben Rankin & Elliott Prod. 1 Stewart, 738 ft. from S and 660 ft. from E lines Sec. 2799, T.E.&L. Sur., 4,400-ft. test, drilling 140 ft.

Montague County: Benson Bros. 1 J. J. Lowery, 1,878 ft. from W and 1,506 ft. from S lines Sec. 72, A. Beason Sur. A-20, 6,200-ft. test, drilling 3,453 ft.

Continental 1 Winder, 467 ft. from N and E lines S 40 of W 80 of N½ of Sec. 4, Limestone County School Lands Sur., 7,200-ft. test, first report.

Walter H. Gant 1 Will Laird, 467 ft. S and E SW cor. F. Cook Sur. A-139, but in R. T. Millard Sur. A-470, still testing.

Walter H. Gant 1 John Turner, 330 ft. from N and E lines Sec. 59, E.T. Sur., did not core, drilling 4,602 ft.

Shell Oil 1 Alice Thomas, 1,255 ft. from W and 467 ft. from S lines Sec. 95, Kaufman County School Lands Sur. A-407, 5,000-ft. test, drilling 4,060 ft.

Superior Oil 1 Wilmer Sealy A, 950 ft. from W and 330 ft. from S lines A. B. Morton Sur. A-1175, 5,700-ft. rotary test, drilling 4,460 ft.

Throckmorton County: Helmerich & Payne 1 Houlsey, 660 ft. from S and E lines Sec. 300, B.B.B.&C. Sur., 4,200-ft. rotary test, 500 gal. acid, fishing swab with 2,000 ft. salt water in hole.

Wichita County: Akin, Dimock & Costley 1 Jackson, 1,715 ft. from N and 750 ft. from E lines J. Walker Sur. A-327, 1,650-ft. test, drilling 960 ft.

Wilbarger County: F. H. E. Oil and Fleming & Kimbell 1 Allison, 467 ft. from S and W lines Allison 90-acre tract out of NW cor. Sec. 54, Blk. 12, H.& T.C. Sur., 6,500-ft. rotary test, drilling 1,301 ft.

Young County: L. T. Burns 1 Jeffery, 1,400 ft. from N and E lines Sec. 47, T.E.&L. Sur., 5,500-ft. rotary test, pits.

Consolidated Oil 1 Dunigan, 467 ft. from S and E lines Sec. 163, T.E.&L. Sur., 5,000-ft. test, S.D. 4,985 ft., repairs.

R. P. Dorian 1 Daniels, 330 ft. from S and W lines Sec. 421, T.E.&L. Sur., 6,000-ft. test, S.D. 4,945 ft., waiting on drilling permit.

F. H. E. Co. and Fleming & Kimbell Corp. 1 Graham, SE cor. Sec. 2912, T.E.&L. Sur., 5,000-ft. test, S.I. 17 hr., 1,800 bbl. salt water and 150 bbl. oil, prep. to reperf. casing.

Tom B. Medders L. Daws, 933 ft. from N, E. S and W lines NW¼ T.E.&L. Sur. 750, 5,500-ft. test, rigging up rotary.

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## Strike East of Novice Field Starts Other Tests

FORT WORTH, Tex., Aug. 4.—The Novice field of Coleman County has been given a 2-mile-east extension with the bringing in of a well from a new pay level for the area. The outpost producer is States Oil 1 Featherstone, M. J. Goble Survey 118. Pay was obtained in coring to 3,600 ft., some 160 ft. below the Gradner sand, which is the main pay level of the Novice field. No. 1 Featherstone was last reported flowing an estimated 360 bbl. daily and preparing for official gage the coming week. Several weeks ago a new gas discovery for the general area was opened by States Oil 1 Hudson, which made 10,000,000 cu. ft. of gas daily from the Gray sand.

Considerable new development is expected for the area, since it is not definitely known yet whether the well opens a new pay level extension area or whether it is an altogether new field. One and one-half miles southeast of the discovery, Josie Hughes has staked 1 Featherston, 2,333 ft. from the west line and midway between the north and south lines of Section 34, Block 2, G.H.&H. Survey. Another scheduled Gray sand test for the area will be Robertson & McKissick of Haskell 1 Finley, which is scheduled for deepening to the Gray sand from 3,383 ft. where it was quit as a failure about 2 months ago.

*(Continued on Page 68)*


# New Men Work Like Old Hands With DRESSERS On Your Line

**Dresser Couplings Permit Use Of Local, Untrained Labor**

*Advantage No. 2 of 12 Proved Advantages Listed in Box Below*

***Check* THESE 12 PROVED ADVANTAGES THAT ONLY DRESSERS GIVE YOU**

1. Dresser Couplings eliminate all uncertainty in joint-making.
2. Dresser Couplings permit use of local, untrained labor.
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In critical times like these when skilled labor is at a premium, the simplicity of Dresser Couplings becomes more and more valuable in pipe-line construction. Local labor, "pick-up" labor, a green crew can install Dressers. No experience necessary, and the only tool needed is a wrench. Factory-built, factory-tested, Dressers are fool-proof. They can be assembled in only one way—the *permanently* tight way—and *any* crew can do it quickly and easily in any kind of weather. Look ahead. Play safe. Specify Dressers and be sure of having the job well done.

**Dresser Manufacturing Co.**

**BRADFORD, PA.**

# DRESSER PIPE COUPLINGS

1891 *No Other Joint Has A Comparable Record of Service* 1941

# Basin's Largest McClosky Well Flowing in New Pool

By STAFF CORRESPONDENT

MATTOON, Ill., Aug. 4.—Illinois operations soared to a new high for the year last week and White County maintained its lead in activity with 24 first reports. Wayne and Jefferson counties, where important discovery wells have been recently completed, followed with 15 and 12 first reports, respectively. Field operations totaled 469 for the week with 118 first reports.

Hamilton County's new pool, opened 2 weeks ago by Shell 1 Ventrees, SW SW SE 12-6s-5e, showed indications last week of becoming an even better pool than expected. Following an acid treatment of 5,000 gal. in the Levias at 3,188-98 ft., 1 Ventrees began flowing at the rate of 150 bbl. an hour. Previous to the acid treatment it flowed 417 bbl. in 24 hours.

The field opened by the test will be the seventh in the county, and from present indications will have at least two pay zones. In addition to the Levias, saturation capable of producing 100 bbl. daily, natural, was encountered in the Aux Vases at 3,117-53 ft. Kingwood et al 1 Johnson, NE SE NE 14-6s-5e, wildcat about ½ mile southwest of Shell's test, last week recovered 180 ft. of oil and 60 ft. of oily mud during a 30-minute drill-stem test of the Aux Vases, topped at 3,172 ft. Location for an offset to Shell's discovery well has already been staked by the Texas Co.

## SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Albion | 3 | 1,272 | 9,496 |
| Benton | 8 | 1,952 | 17,027 |
| Dale | 8 | 4,064 | 24,058 |
| Dundas | 2 | 1,369 | 5,731 |
| Johnsonville | 2 | 673 | 6,155 |
| Mount Carmel | 4 | 469 | 8,098 |
| N. New Harmony | 6 | 1,618 | 16,405 |
| Rising Sun | 3 | 252 | 7,396 |
| Roland | 5 | 833 | 13,813 |
| Other pools | 14 | 3,540 | 33,538 |
| Gas wells Russellville | 1 | *1.0 | 1,134 |
| Wildcat | 1 | *1.5 | 590 |
| Dry holes: Fields† | 14 | ..... | 25,785 |
| Wildcats | 15 | ..... | 27,069 |
| Total | 86 | ..... | 197,295 |
| Gas input wells | 2 | ..... | 3,407 |
| Recompletions | 5 | 309 | ..... |

*Million cu. ft.

†Posey 1, Louden 2, Inman 2, Omaha 1, West Liberty 2, North Boos 1, Bridgeport 2, Plymouth 1, Allendale 1, Mount Carmel 1.

### Wayne County Pool Yields Excellent Producers

Wayne County developments far overshadowed activity in all other parts of the Illinois basin last week as one new pool was opened and a recently discovered pool yielded the largest McClosky producer ever completed in the basin. The new Johnsonville pool, opened a few weeks ago by a 2,000-bbl. McClosky well, last week developed into one of the prospective best fields on the eastern side of the state as five new producers were completed in the field. Outstanding among these was Texas 1 Leathers, 27-1n-6e, ½ mile northeast of the discovery well. Producing without acid from two McClosky pays at 3,015-21 and 3,025-30 ft., the well came in with a flow of approximately 400 bbl. an hour. It flowed 1,690 bbl. in a 4½-hour test and continued to flow at a rate slightly better than 400 bbl. an hour before being choked down. No. 1 Leathers is estimated to be capable of producing 10,000 bbl. daily.

Four other producers were completed in the new field during the week, all with production close to 1,000 bbl. a day. One of these, Texas 1 Watson, 34-1n-6e, came in with a flow of 150 bbl. an hour. Eight new tests are preparing to get under way in the field while four others are drilling and new locations are rapidly increasing.

Wayne County gained another new pool last week with the completion of Texas 1 F. M. Draper as a small McClosky producer. No. 1 Draper, 8-3s-6e, may stimulate some activity in the area, although no offset locations have yet been staked. In addition to the new field opened by 1 Draper, Wayne County may have two more fields within another week.

Pure Oil Co. appears to have a new field about 4 miles south of production in the Cisne field where its 1 Johnson, 12-1s-7e, gushed during a drill-stem test in the McClosky. The company is continuing to core below the upper McClosky pay but will probably set casing to the pay. Watkins 1 Kincaid, semiwildcat in 36-1s-7e, set casing to the McClosky last week and from all appearances will open another new pool. No. 1 Kincaid, about ¾ mile east of the Boyleston pool, is just north of the town of Fairfield and may stimulate the town's long-awaited townsite drilling boom.

### New Cypress Field Opened In White County

White County's new Cypress field was officially opened last week with the completion of Wall-Mitchell 1 Kershaw. No. 1 Kershaw, SW SW NE 22-3s-10e, 5 miles northwest of the Calvin field, was completed for an estimated production of 200 bbl. daily in the Cypress, a new pay zone for the area. Morrison & Noah have started a west offset on the Walter Curtis farm and Wall & Mitchell are getting ready to start a south offset also on the Curtis farm.

### WILDCAT COMPLETIONS

Bond County: Regent Oil 2 Harwood, NW NW SE 36-7n-4w, dry at 927 ft., H.F.W. 780 ft.

Christian County: W. Marlow 1 Howell, SE SE NE 26-15n-2w, dry at 2,016 ft., Ste. Genevieve 998 ft., Chattanooga 1,832 ft., Devonian 1,915 ft.

Clark County: McDevitt et al 1 Hammond, W½ NW NW SE 24-12n-14w, location abandoned.

Clay County: Spud, Frazier & Carleton 1 Weber heirs, N½ NE NE 25-5n-8e, dry at 3,157 ft., Menard 2,303 ft., Waltersburg 2,364 ft., Tar Springs 2,460 ft., Glen Dean 2,525 ft., Hardinsburg 2,558 ft., Golconda 2,592 ft., Barlow 2,678 ft., Cypress sand 2,726 ft., Benoist 2,897 ft., Renault 2,950 ft., Aux Vases 2,963 ft., Ste. Genevieve 3,008 ft., Rosiclare 3,044 ft., Fredonia 3,051 ft., St. Louis 3,148 ft.

Crawford County: Fuller 1 Jones, E½ NW NW 7-5n-11w, dry at 1,395 ft., sand 969-70 ft.

Edgar County: Meyers 1 Courtney, NE NE NW 14-12n-14w, 1,500,000 cut. ft. gas, sand 438-508 ft., T. D. 590 ft.

Monarch Oil 1 Pinnell, SE SE SW 14-12n-14w, dry at 407 ft.

Zink et al 1 Hunt, NE NE NE 14-12n-14w, dry at 390 ft.

Gallatin County: Ryan et al 1 Crunk, N½ NE NW SE 9-8s-9e, dry at 2,881 ft., Kincaid 1,705 ft., Menard 2,101 ft., Glen Dean 2,332 ft., Benoist sand 2,701 ft., Renault 2,805 ft., Paint Creek sand 2,901 ft.

Crum & Tuoner 1 Mienstermann, SW NW NE 18-9s-8e, dry at 2,575 ft., Kincaid 1,318 ft., Menard 1,663 ft., Waltersburg 1,759 ft., Vienna 1,812 ft., Tar Springs 1,847 ft., Glen Dean 1,916 ft., Golconda 2,066 ft., Barlow 2,186 ft., Weiler 2,228 ft., Paint Creek 2,303 ft., Benoist 2,347 ft., Renault 2,378 ft., Ste. Genevieve 2,490 ft., McClosky 2,558 ft.

Henry County: O. Behrens 1 Patton, SE SE SW 1-17n-3e, dry at 1,000 ft., Maquoketa 527 ft.

La Salle County: O. L. Greer 1 Sam Davis Est., SW SW SW 23-35n-2e, dry at 986 ft., Oneota 575 ft.

A. Hanna 1 Baima, NE SE NW 8-32n-2e, location abandoned.

A. Hanna 1 Bottomley, SW NE NW 8-32n-2e, location abandoned.

Marion County: Goodson et al 1 Smith, N½ NW NE SW 25-4n-1e, dry at 1,930 ft., Glen Dean 1,289 ft., Golconda 1,380 ft., Barlow 1,585 ft., Cypress 1,586 ft., Paint Creek 1,646 ft., Benoist 1,740 ft., Aux Vases 1,795 ft., Ste. Genevieve 1,855 ft.

Pope County: Anthony Claro & Rossi 1 Mayer, NE SW NW 29-11s-5e, dry at 1,236 ft., Kincaid 490 ft., Degonia 690 ft., Clore 730 ft., Palestine 853 ft., Menard 923 ft., Waltersburg 1,063 ft., Vienna 1,110 ft., Tar Springs 1,157 ft., Glen Dean 1,213 ft.

Wabash County: H. B. Mortimer 1 J. H. Dager, NW NE SE 31-2n-11w, dry at 2,189 ft., Menard 1,388 ft. Waltersburg 1,455 ft., Vienna 1,509 ft., Tar Springs 1,555 ft., Glen Dean 1,621 ft., Barlow 1,772 ft., Weiler 1,810 ft., Benoist 1,913 ft., Renault 1,982 ft., Aux Vases 2,033 ft., Ste. Genevieve 2,052 ft., McClosky 2,082 ft.

White County: Southern Pet. 1 McIntosh, NE NW SW 30-3s-8e, rig abandoned.

Ryan Oil 1 L. Stokes, NW NW SE 28-4s-10e, dry at 3,260 ft., Kincaid 1,931 ft., Degonia 2,078 ft., Clore 2,139 ft., Palestine 2,205 ft., Menard 2,269 ft., Waltersburg 2,345 ft., Vienna 2,440 ft., Tar Springs sand 2,460 ft., Glen Dean 2,506 ft., Hardinsburg 2,546 ft., Golconda 2,610 ft., Barlow 2,728 ft., Weiler 2,775 ft., Renault 2,981 ft., Aux Vases 2,997 ft., Ste. Genevieve 3,067 ft., McClosky 3,233 ft., St. Louis 3,257 ft.

### FIELD COMPLETIONS

#### Clay County

Sailor Springs: Nat. Refining 1 Eastin, SE SE NW 26-4n-7e, pumped 482 bbl., 10-qt. shot 2,324-28 ft., Tar Springs sand 2,322 ft., T. D. 2,329 ft.

Flora: McClosky 1 E. Neeley, N½ NW SE 13-3n-6e, pumped 30 bbl. from Benoist and McClosky, perf. 2,784-96 ft. in Benoist, old well worked over, T. D. 2,992 ft.

#### Clinton County

Posey: Ross Drlg. 1 Vogel, S½ SW SW SW 9-1n-2w, dry at 1,155 ft., Glen Dean 935 ft., Cypress sand 1,105 ft.

#### Edwards County

Albion: Superior 3 Kiley, NW SW NW 7-2s-14w, pumped 70 bbl., 60-qt. shot 3,009-32 ft., Aux Vases 3,016-20 ft., T. D. 3,150 ft.

Superior 1 Fewkes, S½ NE NE SW 7-2s-11e, flowed 445 bbl., 3,000 gal. acid, McClosky 3,070-81 ft., T. D. 3,156 ft.

Superior 3 Fewkes, SW SE SW 7-2s-11e, flowed 757 bbl., 3,000 gal. acid, McClosky 3,097-3,111 ft., T. D. 3,190 ft.

#### Effingham County

Mason: Lynch & Jansen 1 Burk, NE SE SW NW 27-6n-5e, pumped 20 bbl. oil and 25 bbl. water, 20-qt. shot 2,287-93 ft., Benoist 2,283 ft., T. D. 2,295 ft.

#### Fayette County

Louden: Carter 23-7 E. Rhodes, NE NE SW SW 23-8n-3e, gas input well, Glen Dean 1,253 ft., Cypress 1,386 ft., sand 1,418-22 ft., Benoist 1,527 ft., T. D. 1,533 ft., P. B. 1,530 ft.

Carter 4 O. Morton, SE NE SW 9-7n-3e, dry at 1,600 ft., Cypress sand 1,593-1,600 ft.

Texas 2 Buff, SE SE SW 30-7n-3e, pumped 84 bbl., 10-qt. shot 1,566-73 ft., Cypress sand 1,559 ft., T. D. 1,578 ft.

Jarvis Bros. 13 Walker, SE NE NW 31-7n-3e, dry at 1,839 ft., Glen Dean 1,381 ft., Cypress sand 1,552 ft., Paint Creek 1,619 ft., Aux Vases 1,822 ft.

#### Franklin County

Benton: Menhall 6 Stalkup, SW NE SE 23-6s-2e, pumped 320 bbl., 20-qt. shot 2,059-69 ft., Tar Springs 2,052 ft., T. D. 2,069 ft.

Menhall 7 Stalkup, NE NE SE 23-6s-2e, pumped 250 bbl., 20-qt. shot on bottom, Tar Springs 2,082 ft., T. D. 2,110 ft.

Adkins 4 Orient "C-M", SW SW NW 24-6s-2e, pumped 181 bbl., 20-qt. shot 2,097-2,110 ft., Tar Springs 2,088 ft., T. D. 2,110 ft.

Adkins 2 Auten, SE NE NW 25-6s-2e, pumped 130 bbl., 40-qt. shot 2,134-43 ft., Tar Springs 2,118 ft., T. D. 2,145 ft.

Gibson Jennings 3 Simpson heirs, E½ SE NE NW 25-6s-2e, pumped 253 bbl., 40-qt. shot 2,128-40 ft., Tar Springs 2,113 ft., T. D. 2,141 ft.

Shell 11 W. E. Doty et al, W½ SW NW NE 25-6s-2e, pumped 140 bbl., 15-qt. shot 2,135-45 ft., Tar Springs 2,116 ft., pay 2,116-45 ft., T. D. 2,145 ft.

Wegener 2 C. W. & F. Coal, NE SE SE 26-6s-2e, swabbed 225 bbl., 30-qt. shot 2,140-55 ft., Tar Springs 2,133 ft., T. D. 2,155 ft.

Adkins 2 Lager, NE SE NE 35-6s-2e, pumped 453 bbl., 60-qt. shot 2,116-44 ft., Tar Springs 2,102 ft., T. D. 2,152 ft.

#### Gallatin County

Inman: N. V. Duncan 3 Egyptina T. & T., SE NE SW 16-8s-10e, dry at 2,910 ft., Tar Springs 2,083 ft., Glen Dean 2,188 ft., Golconda 2,298 ft., Barlow 2,413 ft., Cypress 2,433 ft., Renault 2,652 ft., Aux Vases 2,733 ft., Ste. Genevieve 2,740 ft., Fredonia 2,787 ft.

Phillips 9 Egyptian T. & T., NE NE NE 16-8s-10e, pumped 11 bbl. oil and 166 bbl. water, 15-qt. shot 2,088-94 ft., Tar Springs 2,086 ft., T. D. 2,098 ft., P. B. 2,090 ft.

Ritchey 1 Fry, SW SE NE 19-8s-10e, dry at 2,030 ft.

Omaha: Toombs & Smith 1 Patton, NW SE SE 33-7s-8e, dry at 620 ft., sand 598 ft., show oil 598-610 ft., water 610-16 ft.

#### Hamilton County

Dale: Shell 4 Beagle, SW SW SE 6-6s-7e, flowed 1,122 ft., 10-qt. shot 2,958-68 ft., Aux Vases 2,931 ft., Aux Vases sand 2,942 ft., T. D. 2,977 ft.

Pure 1 Fairweather-A, SE NW SW 7-6s-7e, flowed 590 bbl., 130-qt. shot 3,014-35 ft., Aux Vases 3,008-15 ft., 3,017-35 ft., T. D. 3,035 ft.

Shell 1 Dudley, SE NE SW 7-6s-7e, pumped 51 bbl., 10-qt. shot 3,018-25 ft., 3-qt. shot 3,010-13 ft., 50-qt. shot 3,013-18 ft., perf. 2,910-14 ft., Cypress sand 2,706-30 ft., 2,777-2,864 ft., T. D. 3,038 ft., P. B. 2,947 ft.

Shell 1-A Ritcheson, NW SW NE 7-6s-7e, pumped 280 bbl., 10-qt. shot 2,967-77 ft., Aux Vases sand 2,952-77 ft., T. D. 2,985 ft.

Pure 8 Cuppy, NW NE SW 6-6s-7e, flowed 844 bbl., 220-qt. shot 2,972-95 ft., Aux Vases 2,952-70 ft., 2,978-88 ft., T. D. 2,995 ft.

Texas 3 J. E. Clark, SW SE NW 7-6s-7e, flowed 500 bbl. in 21 hr., 30-qt. shot 2,979-3,000 ft., Aux Vases 2,962-72 ft., Ste. Genevieve 2,996 ft., T. D. 3,000 ft.

Texas 4 J. E. Clark, NE SW NW 7-6s-7e, flowed 650 bbl., 20-qt. shot 2,987-3,000 ft., Aux Vases 2,969 ft., T. D. 3,006 ft.

Texas 3 R. R. Johnson, SE NW SE 7-6s-7e, flowed 327 bbl., 40-qt. shot 2,989-3,017 ft., Aux Vases 2,972-3,015 ft., T. D. 3,022 ft.

Hoodville: Texas 2 K. Edwards, SW SE NW 11-6s-6e, flowed 786 bbl., natural, Aux Vases 3,056-69 ft., T. D. 3,070 ft.

Walpole: Texas 1 C. Johnson, W½ NE NE 34-6s-6e, pumped 170 bbl., 30-qt. shot 3,075-3,105 ft., Aux Vases 3,058 ft., T. D. 3,106 ft.

Dahlgren: Seaboard 2 Garrison, N½ SW NW 27-3s-5e, pumped 188 bbl. in 20 hr., 5,000 gal. acid, McClosky 3,284-94 ft., T. D. 3,306 ft.

#### Jasper County

West Liberty: Pure 1 J. R. Sproul, E½ NE SE 18-5n-10e dry at 2,855 ft., Glen Dean 2,283 ft., Barlow 2,439 ft., Cypress 2,455 ft., Aux Vases 2,732 ft., Ste.

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Pure 2 C. C. Byrnes, W½ NW SW 8-5n-10e, dry at 2,875 ft., Glen Dean 2,302 ft., Barlow 2,450 ft., Cypress 2,476 ft., Aux Vases 2,767 ft., St. Genevieve 2,780 ft., Rosiclare 2,798 ft., Fredonia 2,816 ft.
Pure 1 G. W. Richards, E½ SE SE 7-5n-10e, flowed 697 bbl., 5,000 gal. acid, McClosky 2,816-23 ft., 2,835-37 ft., T.D. 2,850 ft.
North Boos: Pure 1 W. H. Hauser W½ NW NW 21-6n-10e, dry at 2,855 ft., Glen Dean 2,295 ft., Barlow 2,433 ft., Cypress 2,450 ft., sand 2,478-80 ft., Ste. Genevieve 2,774 ft., Rosiclare 2,790 ft., Fredonia 2,803 ft.
J. P. Gordon 1 Snyder W½ SE NW 36-7n-10e dry at 2,720 ft.

**Lawrence County**

Russellville: Kentucky Nat. Gas 3 Given et al N½ NW SE NE 18-4n-10w 1,000,000 cu. ft. gas, sand 1,055-34 ft., T.D. 1,134 ft.
Bridgeport: Cameron 2 Akin SE SE NE 30-3n-11w dry at 1,875 ft., McClosky, 1,800 ft.
Cameron 2 Ridgley SE SW NE 1-2n-12w dry at 450 ft.

**McDonough County**

Plymouth: C. H. Harrison 2 G. Bowman SW SW NE 19-4n-4w dry at 741 ft., Mississippian 172-202 ft., Maquoketa 432-56 ft. Trenton 637 ft.

**Marion County**

Salem: Texas 90 City of Centralia E½ NW NW NW 4-1n-2e gas input well, 15-qt. shot 1,846-61 ft., Perf. 1,782-1,801 ft., Benoist 1,771 ft., Aux Vases 1,832 ft., T.D. 1,874 ft.
Magnolia 4 M. Harley NE SW NE 31-2n-2e flowed 116 bbl., natural, Trenton 4,470 ft., old well deepened to 4,598 ft.
East Patoka: Shell 7-A Davidson NW SE NE 34-4n-1e pumped 180 bbl. oil and 5 bbl. water, 20-qt. shot 1,334-63 ft., Cypress sand 1,324 ft., pay 1,326-40 ft. and 1,348-66 ft., T.D. 1,366 ft.

**Richland County**

South Noble: Delta Drlg. 1 Shan W½ SW NW 27-3n-9e pumped 15 bbl., old well deepened from 3,059-3,136 ft., P.B. 3,059 ft.
Dundas: Pure 2 Utterback-A W½ NW SW 29-5n-10e flowed 1,128 bbl., 5,000 gal. acid, McClosky 2,840-48 ft., 2,855-57 ft., 2,860-62 ft., T.D. 2,875 ft.
Pure 1 D. Bennett-A W½ SE SE 30-5n-10e pumped 241 bbl., 5,000 gal. acid, McClosky 2,833-37 ft., T.D. 2,856 ft.

**St. Clair County**

Dupo: Tarleton Oil 2 J. Reichert NW NW NW 34-1n-10w pumped 100 bbl. oil and 600 bbl. water, 1,000 gal. acid, Trenton 637 ft., T.D. 697 ft.

**Wabash County**

Allendale: S. W. Petrie 1 Schafer SE SW SW 14-1n-12w dry at 1,983 ft., Menard 1,490 ft., Waltersburg 1,541 ft., Vienna 1,600 ft., Tar Springs 1,612 ft., Glen Dean 1,714 ft., Golconda 1,843 ft., Barlow 1,925 ft., Cypress 1,948 ft., sand 1,974 ft.
Mt. Carmel: Shell 7 Hein NW SE SE 18-1s-12w pumped 28 bbl., 3-qt. shot 2,046-49 ft., Cypress sand 2,041 ft., T.D. 2,053 ft.
Ill.-Midcontinent 1 Floyd N½ NW NE SE 20-1s-12w pumped 141 bbl. oil and 10 bbl. water, 20-qt. shot on bottom, Cypress sand, 2,031 ft., T.D. 2,054 ft.
Baker 1 Friend W½ NW NE SW 21-1s-12w pumped 125 bbl., 30-qt. shot on bottom, Cypress sand 1,987 ft., T.D. 1,997 ft.
Ill.-Midcontinent 1 Taggart N½ NW SE SW 21-1s-12w dry at 2,046 ft., Glen Dean 1,832 ft., Golconda 1,930 ft., Barlow 2,027 ft.
Yingling 1 Smith, Lot 169, 21-1s-12w, pumped 175 bbl., 30-qt. shot 1,981-94 ft., Cypress sand 1,980-89 ft., T.D. 1,994 ft.
Maud: F Tatum 1 Alka NE SW SW 34-1s-13w pumped 25 bbl., perf. 2,550-60 ft., Aux Vases 2,550-65 ft., old well worked over, T.D. 2,676 ft.
South Griffin: Longhorn 14 Helm NE NE SE 22-3s-14w pumped 400 bbl., natural, Tar Springs 2,156 ft., T.D. 2,171 ft.

**Wayne County**

Johnsonville: Wiser 2 Hilliard N½ SE SW 27-1n-6e flowed 510 bbl., 5,000 gal. acid, reacid 5,000 gal., perf. 2,968-71 ft., 2,999-3,002 ft., McClosky 3,016-24 ft., 3,028-31 ft., T.D. 3,069 ft.
Wiser Oil 1 Watson N½ SE NW 34-1n-6e flowed 163 bbl. 5,000 gal. acid, perf. 3,000-03 ft., 3,036-42 ft., 3,049-53 ft., 3,056-61 ft., McClosky 3,036 ft., T.D. 3,086 ft.
West Enterprise: Pure 1 Harrington-B E½ SW NW 12-1n-7e pumped 351 bbl., 5,000 gal. acid, McClosky 3,043 ft., T.D. 3,075 ft.

**White County**

North New Harmony: Superior 4 Fitten-B E½ SW SE SE 28-4s-14w pumped 403 bbl. in 14 hr., 160-qt. shot 2,558-93 ft., Cypress sand 2,545-95 ft., T.D. 2,595 ft.
Sun 31 Greathouse, SE NW SW 33-4s-14w, pumped 72 bbl., 40-qt. shot 2,590-2,605 ft., Cypress sand 2,588-2,605 ft., T.D. 2,605 ft.
Superior 17 Fitten-A., NE NW 33-4s-14w, pumped 350 bbl., 100-qt. shot 2,577-99 ft., Cypress sand 2,566-2,600 ft., T.D. 2,600 ft.
First Nat. Pet. Trust 2 Johnson, SE SE NW 5-5s-14w location abandoned.
Superior 14 Fitten, NE NE NW 28-4s-14w pumped 383 bbl., 60-qt. shot 2,708-20 ft., perf. 2,591-2,605 ft., Cypress 2,590-2,629 ft., Benoist 2,691-2,770 ft., T.D. 2,860 ft.
Superior 13 Fitten, SE NE NE 28-4s-14w, pumped 250 bbl., 10-qt. shot 2,839-65 ft., perf. 2,592-2,604 ft., Cypress sand 2,593-2,638 ft., Aux Vases 2,833-60 ft., T.D. 2,865 ft.
Superior 15 Fitten, SW NE NW 23-4s-14w, pumped 160 bbl., 16 per cent b.s.&w., 130-qt. shot, 2,852-80 ft., perf. 2,594-2,605 ft., 2,224-44 ft., Aux Vases 2,856-68 ft., Cypress sand 2,591-2,617 ft., Glen Dean 2,224-46 ft.
Sun 10 Greathouse, NE SW SE 33-4s-14w pumped 123 bbl., 140-qt. shot 2,579-2,610 ft., perf. 2,183-2,200 ft., old well deepened from 2,593-2,610 ft.
East Calvin: Sinclair 5 Donald, SE SE SW 21-4s-14w pumped 69 bbl., 100-qt. shot 2,853-60 ft., perf. 2,598-2,604 ft., Cypress 2,596-2,608 ft., Aux Vases 2,841-60 ft., T.D. 2,860 ft., P.B. 2,720 ft.
Carter et al 1 Ford, SW NE NW 21-4s-14w pumped 20 bbl., 2,000 gal. acid, McClosky 2,934 ft., T.D. 2,937 ft.
Rising Sun: Skelly 2 Karch NE NE NW 24-6s-10e pumped 65 bbl. oil and 35 bbl. water, 40-qt. shot 2,854-70 ft., perf. 2,222-24 ft., Aux Vases sand 2,853 ft., T.D. 2,878 ft.
Magnolia 3 Sisson-Higgins, SW SW SE 24-6s-10e pumped 62 bbl., 2½-qt. shot on bottom, Tar Springs 2,256 ft., T.D. 2,262 ft.
Brehm 1 Higgins-Sissons, SE SE SW 24-6s-10e pumped 125 bbl., 20-qt. shot 2,248-56 ft., Tar Springs sand 2,242 ft., T.D. 2,256½ ft., P.B. 2,256 ft.
Roland: Arrow Drlg. 1 Mitchell, NE NW SW 11-7s-8e pumped 213 bbl., 30-qt. shot on bottom, Waltersburg 2,159 ft., T.D. 2,179 ft.
Carter 1 Hamilton, SW SW NE 11-7s-8e pumped 307 bbl., natural, Waltersburg 2,160-75 ft., T.D. 2,175 ft.
Sinclair 4 Mitchell, NE NW SE 11-7s-8e pumped 105 bbl. from Waltersburg and Benoist, 20-qt. shot 2,751-56 ft., perf. 2,163-70 ft., Benoist 2,763-71 ft., 2,771 ft.
Tide Water 2 Baker, SW SE SE 11-7s-8e pumped 40 bbl. oil and 175 bbl. water, 40-qt. shot 2,759-71 ft., ripped casing 2,187-91 ft., Menard 2,064 ft., T.D. 2,771 ft.
N. V. Duncan 1 Baker, E½ NE NW NW 14-7s-8e flowed 168 bbl., 30-qt. shot 2,900-12 ft., Aux Vases 2,880 ft., T.D. 2,917 ft.

**ILLINOIS DRILLING REPORT**

Clay County: Delta Prod. 1 Crackle, S½ SW SE 23-4n-8e, first report, rig.
Coles County: W. Thomas 2 S. P. Taylor, E½ E½ SW NE 33-14w-10e, machine on ground, first report.
A. M. Meyers 1 Ashmore, E½ SE NW SW 28-13n-14w, first report, drilling 157 ft.
Effingham County: Katherine Benson 1 Comm., NW NW NE 22-6n-5e, Benoist 2,309 ft., cored 2,311-15 ft., recovered 3½ ft. tight sand, T. D. 2,315 ft., running 7-in.
Carter 1 J. N. Tenney, NW NE SW 31-9n-4e, location, first report.
Fayette County: J. T. Elmore 1 Keith, SE NE NW 18-6n-1w, underreamed 7-in. at 1,100 ft., drilling 1,236 ft.
Franklin County: J. A. Burhans 1 Viehl, E½ NE SW 12-5s-3e, Menard 2,288 ft., upper Pennsylvanian 2,530 ft., Glen Dean 2,553 ft., drilling 2,609 ft.
Hamilton County: Kingwood et al 1 Johnson, NE SE NE 14-6s-5e, Benoist 3,122 ft., Renault 2,133 ft., Aux Vases 3,172 ft., 30-min. drill stem test 3,164 ft., recovered 180 ft. oil and 60 ft. oily mud, T. D. 3,196 ft., 7-in. 3,158 ft., waiting on cement.
Jasper County: Pure 1 Wagner Consol., W½ NW NW 11-6n-10e, location, first report.
Jefferson County: Ruwaldt & Baker 1 Rnyski, SE SE NW NW 35-2s-1e, location, first report.
Nation 1 Chesnick, SW NW SE 26-2s-1e, first report, drilling 1,735 ft.
Marion County: Texas 1 Kagy, S½ SW NE 7-2n-2e, first report, 10-in. 108 ft., drilling 844 ft.
Morgan County: Magnolia 1 J. B. Kiplinger, SW SW SE 28-13n-8w, location, first report.
Randolph County: Holst Oil Corp. 1 Faulkenheim, E½ NE NW NE 12-5s-7w, running 7-in. 545 ft.
Wayne County: Olson Drlg. 1 Porter, W½ NW SE 36-1n-6e, first report, 8-in. 68 ft., drilling 2,250 ft.
White County: W. F. Catlett 1 Calvert, SE SE NW 32-5s-10e, first report, drilling 970 ft.
Texas 10 A. J. Poorman, E½ SW SW 19-3s-8e, first report, 10-in. 92 ft., waiting on cement.


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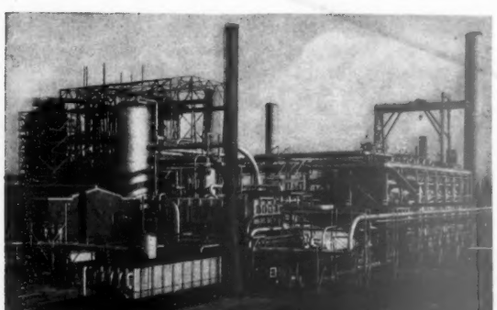

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# Raisin City Gas May Prove as Important as Oil Strike

By L. P. STOCKMAN

LOS ANGELES, Calif., Aug. 4.—Shell Oil Co. removed any doubt that may have existed about the existence of a new oil and gas field in the Raisin City district of Fresno County by completing 1-19 Santa Ana & Fresno Land Co. in 19-15s-18e flowing 736 bbl. of clean 24.1-gravity oil and 400,000 cu. ft. of gas daily through a 22/64-in. bean from 5,049 ft. The productive zone, which is of Pliocene age, is at 5,022-49 ft. This portion of the interval was selected as it excluded the gas cap from production.

Previously this well showed a very high gas-oil ratio and was bothered considerably with a sand problem for several weeks in spite of the fact that several liners with various mesh perforations were tried out. The hole was finally completed with a 7-in. water string cemented at 5,022 ft. and 67 ft. of 5-in. wire-wrapped liner including 27 ft. of 20 mesh perforations.

This new well is located south of the discovery well that proved to be a gas well and although it made a better showing than the discovery it is still believed that the axis of the Raisin City structure is north and northwest of Shell's operations to date. Tentative plans have been made to drill the third Raisin City well north of the discovery which will give operators a close approximation of the dips of the structure. Other operators will probably wait until Shell has drilled its third well before starting work although there is a possibility that one well on a lease about 3,500 ft. away from Shell's discovery may be started within the next few weeks.

Raisin City, the first productive oil and gas field found north of the Coalinga field, opens up considerable territory in the northern San Joaquin Valley for development and prospecting. A number of Cretaceous gas fields have been found in the central part of the state but Raisin City is the first major accumulation of oil and gas north of Coalinga. The overthrow of this age-old axiom of no oil north of Coalinga and east of the Santa Ana River has already resulted in extensive leasing and will lead to additional prospecting later this year and in 1942.

Gas from the Raisin City field in Fresno County is destined to go north to the San Francisco Bay region unless a change is made as a result of the natural-gas survey now under way by several state departments.

### Industrial Gas Users May Switch to Fuel Oil Soon

This survey was started primarily to determine the best means of conserving natural gas so that there would not be any shortage in the immediate future for domestic use. It is expected that many manufacturing companies will be obliged to revert to fuel oil in the not distant future. Instructions have already gone out to manufacturers of defense material to make immediate arrangements to install standby equipment that can be used for the consumption of fuel oil in case there should be a disruption in natural-gas facilities due to unforeseen difficulties.

Pacific Gas & Electric Co. recently completed preparations to lay a 41-mile natural-gas line to increase deliveries in the Fresno, California, district but plans were disrupted by discovery of the Raisin City field by Shell Oil Co. Pacific Gas & Electric Co. had planned to run this new line from Kettleman North Dome field but will now wait to determine if there will be sufficient natural gas at Raisin City to meet requirements. If developments indicate there will be an ample supply the Fresno line will extend to Raisin City instead of Kettleman.

### Wildcatting Increases Faster Than Expected

There has been a very perceptible increase in wildcat operations throughout the state and while this has been expected in view of the extensive leasing that has taken place during the past 2 years it was not believed that this projected work would all start within so short a period. It is quite probable that the impending shortage of drilling equipment was responsible in a way for this substantial increase in prospecting. Another factor that appears to have been lost sight of is that conditions have taken on a more favorable aspect.

## SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: San Joaquin Valley | 7 | 6,643 | 55,692 |
| Coastal district | 5 | 5,006 | 37,346 |
| Los Angeles Basin | 8 | 3,642 | 39,127 |
| Dry holes: Wildcats | 3 | ..... | 24,730 |
| Fields | 2 | ..... | 14,591 |
| Total | 25 | 15,291 | 171,486 |
| Recompletions | 3 | 125 | ..... |

Gasoline consumption has broken all existing records in Pacific Coast territory and every indication points to the probability that sales of motor fuel during July, August and September will equal or surpass total sales for the entire first 6 months of 1935. Fuel-oil demand has been on the increase for nearly 2 years and has not yet reached the peak as far as can be ascertained. Railroad consumption of fuel oil and diesel, reflecting the demand for defense material, has reached the highest level ever attained and a further gain is anticipated as many of the defense industries are just hitting their full stride.

An impending and possible shortage of tankers may force a restriction in marketing areas as every indication points to the probability that more and more tankers will be withdrawn from Pacific Coast service. One company has already started barging oil to the Northwest and more of this will follow if conditions become critical. The first attempt is more or less of an experiment or at least the initial attempt to determine the feasibility of this means of transportation. It is questionable whether California has the large potential production credited to it and for this reason drilling must be continued.

### SAN JOAQUIN VALLEY COMPLETIONS

Coalinga Southeast, Fresno County: Lytle, R. S. 68-7-F, 7-20s-16e, flowed 2,100 bbl., 31.4-gravity, 0.6 per cent cut, 1,262,000 cu. ft. gas, 38/64-in. bean, pressures 900/1,100 lb., T.D. 7,993 ft., 100-mesh perf. 7,363-7,624 ft., 7,663-7,978 ft.; completed in Gatchell zone of Eocene age; Temblor 5,176 ft., Kreyenhagen 6,240 ft., green sand 7,343 ft., Gatchell oil sand 7,368-7,966 ft.; bottomed in Gatchell silt.

Standard 41-31-B fee, 31-19s-16e, flowed 2,586 bbl., 26.4-gravity, 0.2 per cent cut, 1,566,000 cu. ft. gas, 36/64-in. bean, pressures 900/1,200 lb., T.D. 8,192 ft., 60-mesh perf. 8,076-8,187 ft.; Kreyenhagen 6,738 ft., green sand 7,952 ft., oil sand 8,085-8,192 ft.; completed in Gatchell oil zone of Eocene age.

Greeley, Kern County: Standard 12-14 Kern County Land, 7-29s-26e, flowed 696 bbl., 35.9-gravity, 0.7 per cent cut, 550,000 cu. ft. gas, 32/64-in. bean, pressures 800/1,190 lb., T.D. 11,510 ft., perf. 11,479-11,509 ft.; completed in Rio Bravo zone 11,442 ft. and Vedder zone 11,482-11,510 ft., of Miocene age.

Kettleman North Dome, Fresno County: K.N.D.A. 314-28-J, flowed compressor 12 bbl., 31.8-gravity, 4 per cent cut, T.D. 10,495 ft., perf. 9,875-10,460 ft.; top Temblor 6,723 ft.

Standard 67-E-17-Q fee, 17-22s-18e, flowed 318 bbl., 34.1 gravity, 330 bbl. water, 1,000,000 cu. ft. gas, 32/64-in. bean, pressures 500/750 lb., T.D. 10,131 ft., perf. 9,830-10,126 ft.; completed in McAdams sand of Eocene age 9,828-10,131 ft.

McKittrick, Kern County: Franco-Western Oil Co. 22 Front, 8-30s-22e, pumped 195 bbl., 17.1-gravity, 20 per cent cut, T.D. 2,340 ft., P.B. 2,322 ft., 80-mesh perf. 2,245-2,300 ft.; completed in McKittrick zone of Pliocene age.

Raisin City, Fresno County: Shell 1-19 S. A. & F., 19-15s-18e, flowed 736 bbl., 24.1-gravity, 0.6 per cent cut, 400,000 cu. ft. gas, 22/64-in. bean, pressures 370/650 lb., T.D. 5,049 ft., perf. 5,022-49 ft.; second completion in Raisin City field; productive interval is Pliocene in age.

### SAN JOAQUIN VALLEY OUTPOSTS

Belridge, Kern County: Belridge Oil Co. 55-26 fee, 26-27s-20e, drilling 9,851 ft. in gray siltstone; this deep test is below top of productive Wagonwheel zone of Eocene age; top Eocene 9,545 ft.; elev. 658 ft.

Buena Vista Hills, Kern County: Honolulu 25-P fee, 10-32s-24e, T.D. 14,622 ft., P.B. 11,093 ft., drill pipe stuck, spotted oil, recovered to 12,880 ft., elev. 916 ft.

Elk Hills, Kern County: Standard 42-31-S fee, 31-30s-24e, T.D. 8,021 ft. in shale, lost drill pipe, redrilling 6,010 ft.; elev. 1,122 ft.

Standard 45-19-S fee, 19-30s-24e, drilling 9,440 ft. in sand; elev. 707 ft.

Standard 7-33-S fee, 33-30s-24e, drilling in sand and shale 3,050 ft.; elev. 59 ft.

Greeley, South, Kern County: Macrate, A. N. 1 Haberfeld, 32-29s-26e, drilling 642 ft. in sand; elev. 338 ft.

Kettleman North Dome, Kings County: Standard 1-1-U fee, 1-23s-16e, drilling 12,772 ft. in hard gray sand, showing considerable gas; elev. 693 ft.

Midway-Sunset, Kern County: North Amer. Oil Cons'd. 1-28 W.P., 28-32s-23e, T.D. 8,010 ft. in very hard shale with streaks of tight impervious sand, cleaning out; elev. 1 560 ft.

Mountain View, Kern County: Richfield 1 Mountain View, 16-30s-28e, location staked.

Union Avenue, Kern County: Hancock Oil Co. 1 Watts, 8-30s-28e, rig erected.

### SAN JOAQUIN VALLEY WILDCATS

Altamont district, Alameda County: Shell 1 Nissen, 7-2s-3e, rig erected.

Burrell district, Fresno County: General Pet. 1 Burrell, 2-17s-18e, drilling 6,607 ft. in siltstone and gray sand, showing gas and salt water; elev. 210 ft.

Buttonwillow district, Kern County: Texas 47-15 Southern Pacific, 15-29s-24e, T.D. 12,138 ft., P.B. 4,700 ft.; tested hard tight Stevens oil sand and shale, fair blow, fluid 90 per cent water and 5 per cent oil; will probably abandon; elev. 297 ft.

Superior 13 Kern County Land, 18-29s-25e, drilling and spot coring in sand and shale 12,171 ft.; elev. 313 ft.

Bellevue district, Kern County: Ohio 1-G Kern County Land, 36-29s-26e, drilling 10,384 ft. in sand and shale below Stevens zone; elev. 373 ft.

Chowchilla district, Madera County: Shell 74-9 Chowchilla Farms, 9-11s-14e, rig erected.

Delhi district, Yolo County: Amerada 1 Finance Construction Co., 4-6n-3e, drilling 4,246 ft. in sand; elev. 8 ft.

Delano district, Kern County: Associated 46 Quinn, 8-25s-27e, joint test with Union Oil Co.; building rig.

Ducor district, Tulare County: Texas 77-1 Graham & Loftus, 1-26s-26e, rig; elev. 465 ft.

Dyer Creek district, Kern County: Shell 56-X-11, 11-26s-27e, location staked.

Helm district, Fresno County: Amerada, 31-34 Clover, 34-16s-17e, location.

Jacalitos district, Fresno County: Wilshire-Annex Oil Co. 33-26-E, rigging up.

Lost Hills district, Kern County: Associated 46-16 fee, 16-27s-21e, drilling in sandy shale 6,591 ft.; elev. 424 ft.

Monocline Ridge district, Fresno County: Seaboard Oil Co. 2 Hagood, 6-17s-13e, drilling 3,020 ft. in sand and shale.

Panoche district, Fresno County: Richfield 1 Stone-Bragg, 33-13s-12e, rig standing.

Pyramid Hills district, Kings County: Pyramid Prod. Co. 2 Spreckels, 16-24s-18e, drilling in sand 1,594 ft., elev. 673 ft.

Raisin City district, Fresno County: Shell 7-18 Properties, Inc., 18-15s-18e, location staked north of discovery well.

Richgrove district, Kern County: Dawson, A. E. 1 Wells, 3-25s-27e, drilling 1,232 ft. in sand and shale.

Rio Vista district, Solano County: Jergins Oil Co. 1 Twitchell, 17-3n-3e, drilling 4,182 ft. in sand and shale; elev. 15 ft.

Standard 1 Suisun Comm., 36-4n-2w, drilling 2,484 ft. in sand and shale.

Standard 2 State, 30-4n-3e, drilling 1,891 ft. in sand and shale.

Superior 1 Larson, 8-3n-3e, building rig 330 ft. S. 1,023 ft. E from NW cor. of section.

Superior 1 McCormack, 9-3n-3e, location staked 3,680 ft. N. 330 ft. E from SW cor. section.

Sharkey Landing district, Glenn County: Holly Sugar Co. 1 fee, 32-22n-1w, T.D. 4,349 ft.; fish in hole may result in early abandonment; no showing of importance; elev. 32 ft.

Shafter district, Kern County: Continental 2-G Kern County Land, 35-27s-24e, drilling ahead at 12,050 ft. in sand and shale; elev. 327 ft.

## West Dominguez Production Falls Off

The most important development in Los Angeles Basin is the rapid decline in the production of wells in the west end of the Dominguez field and the substantial loss of pressure in the seventh Callender zone from which these edge wells are producing. During the current week the first well went on the pump due to lack of gas pressure and this is usually the tipoff that pressure throughout the area is on the toboggan. In addition to this two wells were abandoned. One of these was in the northern end of the town-lot area where previous wells have not looked any too good and the other was west of Main street in the southern end of the area. Some of the wells drilled in the town-lot area will or may pay out but it begins to look like some of the latest completions can never hope to regain even the initial investment.

The amount of oil found in the seventh Callender zone is too thin to sustain development on the basis of one well per acre. During the first stages of development the statement was made that the seventh Callender zone in the extreme west end of the Dominguez field could not possibly yield much in excess of 25,000 bbl. per acre provided Union Oil Co. drilled offset

*(Continued on Page 66)*

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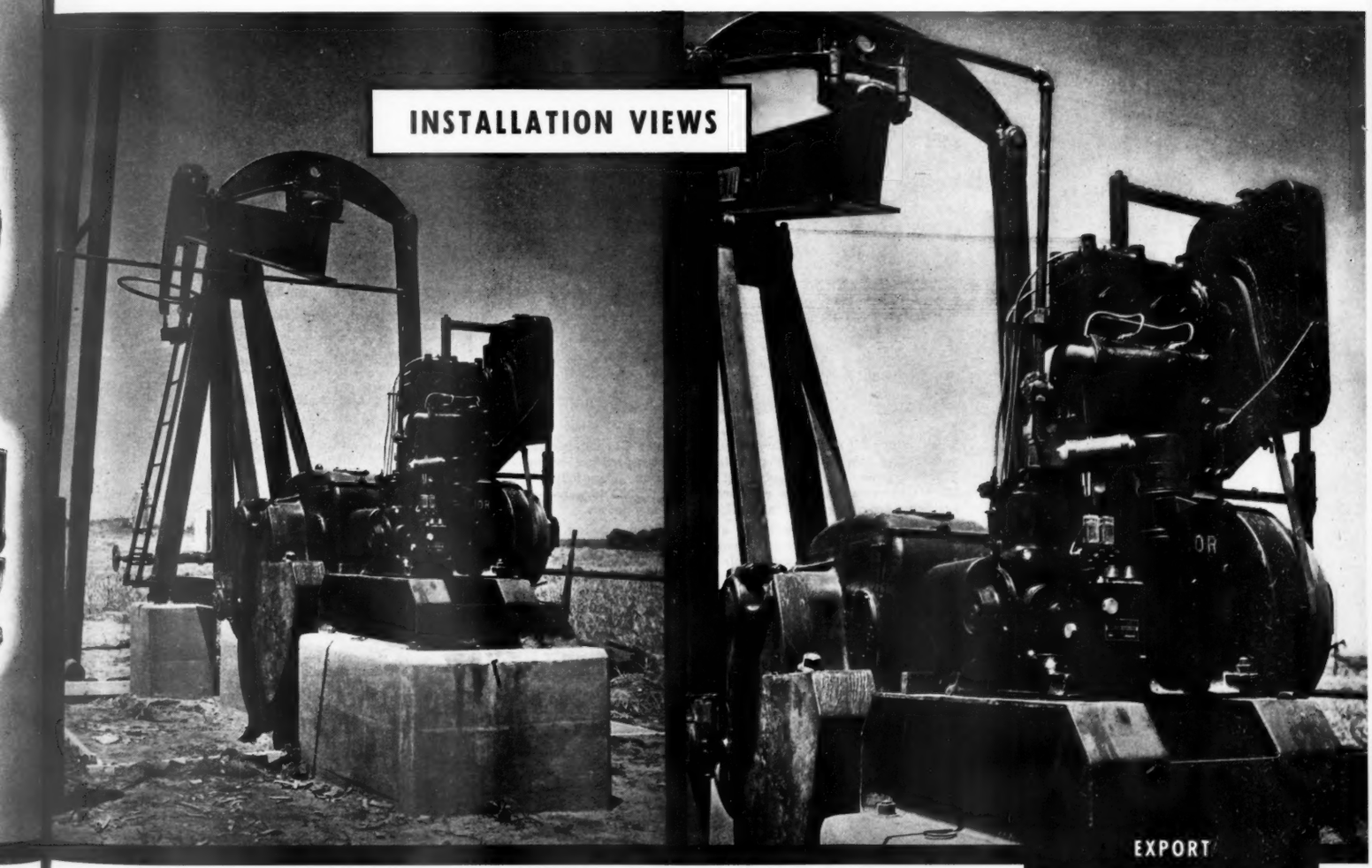


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wells in the west end of its Austin lease. This estimate still looks good and means that the first into the area would recover their investment and make a fair profit but that the last in would not come out even. There is a possibility that at least one well now drilling will be carried down to the eighth Callender zone and this may bear watching if the well is located close enough to the nose of the anticline.

### Two Tests Scheduled At Inglewood

There was no appreciable change in the status of development work in the Inglewood field of Los Angeles County during the week except that Standard Oil Co. and Tide Water Associated Oil Co. are making arrangements to begin immediate drilling. The former's test will be 2-12 Vickers and the latter's well will be 70 Vickers both being located in the northwest end of the field.

Royalty Service Corp. has abandoned 1 Marlow-Burns as a duster at 8,787 ft. This well was running so deep structurally that the company could never hope to encounter the Sentous zone even if it was present under the property in question. In addition to this the well was located east of the Inglewood fault which practically parallels the axis of the structure and far down on the north flank of the structure. Its abandonment did not prove unexpected.

Drilling operations in the Inglewood field have not shown much change from a numerical standpoint during the past several weeks as major companies are sitting tight and not doing much work to protect their respective properties from drainage. Leases provide that an operator holding a lease must drill offset wells whenever a well is completed on an adjoining lease within a specified distance, usually 300 ft. Operators are holding to this strict interpretation but the zone is being drained by producing wells irrespective of location on the structure.

### LOS ANGELES BASIN COMPLETIONS

Athens Wildcat district, Los Angeles County: R. S. Lytle 1 Anderson, 1-3s-14w, abandoned because of severe gas blowout that ruined hole; T.D. 8,175 ft.; could not recover circulation after reentering hole; had minor showings before blowout; skidded rig to new location.

Dominguez, Los Angeles County: Johnson and Richardson 1 Clemar, 30-3s-13w, pumped 175 bbl., 32-gravity, 1.5 per cent cut, T.D. 7,253 ft., 100-mesh perf. 7,205-47 ft.; completed in seventh Callender zone; this is first pumping well in West Dominguez town-lot area.

Lebow-McNee Oil Co. 1 Bouska, 30-3s-13w, abandoned; T.D. 7,289 ft.; seventh Callender zone of Miocene age was barren gray sand.

Shell 121 Reyes, 33-3s-13w, flowed gas lift 215 bbl., 29.5-gravity, 3.5 per cent cut, 250,000 cu. ft. net formation gas, T.D. 4,260 ft., perf. 3,880-4,010 ft., 4,020-50 ft., 4,065-4,153 ft., 4,165-4,202 ft., 4,212-55 ft.; completed in first Callender zone of Pliocene age.

West Dom. Associates 1 Gross, 29-3s-13w, abandoned; T.D. 7,302 ft., redrilled to 7,249 ft.; seventh Callender zone was wet on three cement jobs.

Huntington Beach, Orange County: Wilbur, V.R.G. 3 Twining, 2-6s-11w, pumped 65 bbl., 24.5-gravity, 10 per cent cut, T.D. 4,595 ft., perf. 3,729-3,971 ft., 4,010-4,295 ft., 4,320-4,450 ft., 4,467-4,595 ft., recompleted after being deepened from 3,487 ft.

Inglewood, Los Angeles County: Howard & Co. 1 Valenzuela, 7-2s-14w, flowed 1,125 bbl., 33.4-gravity, 3 per cent cut, 800,000 cu. ft. gas, 38/64-in. bean, pressures 350/800 lb., T.D. 8,301 ft., perf. 7,974-8,301 ft.; completed in Sentous zone of Miocene age.

Royalty Service Corp. 1 Marlow-Burns, 8-2s-14w, abandoned; T.D. 8,787 ft.; formation in bottom of hole shale; well log did not correlate with Miocene wells nearer axis of structure; no nodular shale marker found.

Long Beach, Los Angeles County: Brown, R. A. 1 Rosemond, 19-4s-12w, pumped 42 bbl., 28.1-gravity, 35 per cent cut, T.D. 7,050 ft., perf. 6,705-7,050 ft.; recompleted after being deepened from 5,847 ft.

Santa Fe Springs, Los Angeles County: Hathaway Co. 117 Jalk, 6-3s-11w, pumped 90 bbl., 32.5-gravity, 1.6 per cent cut, T.D. 4,612 ft., perf. 4,342-4,612 ft.; completed in Bell zone of Pliocene age.

Torrance, Los Angeles County: O'Donnell, J. E. 74 Torrance, 30-4s-13w, pumped 18 bbl., 16.4-gravity, 6 per cent cut, T.D. 3,730 ft., perf. 3,610-3,730 ft.; deepened from 3,668 ft. and recompleted in equivalent of Ranger zone.

Silver Pet. Co. 3 Torrance, 30-4s-13w, flowed 90 bbl., 17.1-gravity, 2 per cent cut, 35/64-in. bean, pressures 10/50 lb., T.D. 3,748 ft., gravel-packed perf. 3,141-3,231 ft., 3,471-3,746 ft.; completed in equivalent of Ranger zone.

Wilmington, Los Angeles County: Mitchell & Son 2 Lagoon, 32-4s-13w, pumped 110 bbl.; 17.1-gravity, 30 per cent cut, T.D. 3,718 ft., perf 3,015-3,160 ft., 3,200-3,321 ft., 3,510-3,627 ft., 3,660-3,718 ft.; completed in Ranger zone.

Ring Oil Co. 6 Wilmington, 32-4s-13w, pumped 165 bbl., 14.6-gravity, 5 per cent cut, T.D. 3,575 ft., perf. 2,620-2,725 ft., 2,875-3,100 ft., 3,300-3,575 ft.; completed in Ranger zone.

Seashore Oil Corp. 9 Harbor, 4-5s-13w, flowed 1,672 bbl., 16.2-gravity, 1 per cent cut, 48/64-in. bean, pressures 300/350 lb., T.D. 3,660 ft., perf. 2,806-3,100 ft., 3,140-3,297 ft., 3,338-3,495 ft., 3,538-3,600 ft.; completed in Ranger zone.

### LOS ANGELES BASIN OUTPOSTS OR DEEP TESTS

Dominguez, Los Angeles County: Havenstrite, R. E. 7 Larronde 29-3s-13w, drilling 7,250 ft. in oil sand; elev. 40 ft.

Hileford Associates 1 Developers, 29-3s-13w, drilling 3,394 ft. in sand.

Hiles-Crawford and associates 1 Willis, 29-3s-13w, drilling in oil sand and shale 7,253 ft., cleaning out; elev. 35 ft.

Inglewood, Los Angeles County: R. R. Bush Oil Co. 1 Merchants, 7-2s-14w, drilling oil sand and sandy shale 8,872 ft.; elev. 190 ft.

R. R. Bush Oil Co. 1 Smith, 7-2s-14w, T.D. 8,490 ft. in sand and shale; nodular shale 8,100 ft.; elev. 185 ft.

Jergins Oil Co. 2 Howard, 7-2s-14w, location graded.

Royalty Service Corp. 1 Furthman, 7-2s-14w, grading location; elev. 105 ft.

Standard 2-12 Vickers, 7-2s-14w, rig.

Texas 8 Smith, 7-2s-14w, drilling 4,069 ft. in sand; elev. 242 ft.

Tide Water Associated 70 Vickers, 8-2s-14w, rigging up and preparing to spud; elev. 229 ft.

Traders Oil Co. 1 Bush, 8-2s-14w, graded location.

Potrero, Los Angeles County: Associated 5 Cypress, 34-2s-14w, building rig.

Rosecrans, Los Angeles County: R. S. Lytle 2 Anderson, 1-3s-14w, skidding rig from 1 Anderson which has been abandoned.

### LOS ANGELES BASIN WILDCATS

Chino district, San Bernardino County: Prado Pet. Corp. 1 Lamp, 31-2s-7w, drilling 1,330 ft. in surface sand; elev. 560 ft.

Manhattan Beach district, Los Angeles County: Dominguez Ext. Oil Co. 1 Sunset, 19-3s-14w, redrilling 5,926 ft. in streaks of oil sand; elev. 135 ft.

Mines district, Los Angeles County: Six Companies 1 Poso Seco, 2-3s-15w, location graded; joint test by Standard, Union, Texas, Associated, Richfield and Shell which bought acreage in fee a few years ago.

Palos Verdes district, Los Angeles County: Newton Dev. Co. 1 P.V., 13-5s-15w, drilling 1,960 ft. in hard sand and shale with cable tools; fishing reamer; some basalt found.

Puente district, Orange County: Sunset Oil Co. 1 Baldwin, 11-2s-11w, drilling 550 ft. in sand.

Whittier district, Los Angeles County: Continental Oil Co. 1 Turnbull, 13-2s-11w, drilling 1,492 ft. in sand and shale; elev. 535 ft.

Wilmington district, Los Angeles County: Wilcox, J. F. 1 North, 20-4s-13w, drilling 2,684 ft. in sand; elev. 46 ft.

## Coastal District Leads In Wildcatting

Operators in the Coastal district are still aggressively developing properties in the Newhall-Castaic, Rincon and Ventura Avenue fields. In the San Martinez field, located west of the Del Valle field, Bankline Oil Co. has spudded in its offset to Fred Jasper's discovery well and two additional offsets will be started within

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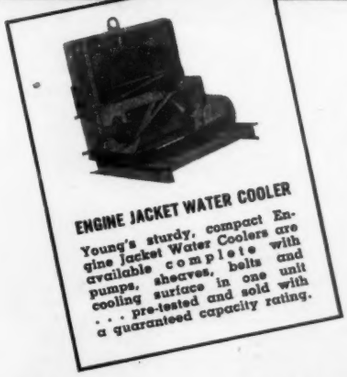

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the next 15 days. Western Gulf Oil Co. is digging up orange trees on the celebrated Camulos ranch near Piru in Ventura County preparatory to starting a wildcat in 22-4n-18w. Barnsdall Oil Co. has abandoned its second wildcat on the jail farm property in the Castaic region and no plans have been made with reference to the possibility of undertaking additional wildcat work.

It would appear likely that the company will make a complete survey of the property before undertaking any additional work and for this reason it may be another several months before final decision is made. This property showed promise as far as the first well is concerned but the second well failed to show anything worth logging.

In the Rincon field, Chanslor-Canfield Midway Oil Co. is redrilling at 8,350 ft. in 9-C Hobson, a deep test which was drilled to 9,337 ft., at which depth mechanical trouble developed and necessitated a redrilling job. The company milled out a window in the 6⅝-in. casing at 7,714 ft. and has since been making good time.

### COASTAL DISTRICT WILDCATS

Castaic Wildcat district, Los Angeles County: Barnsdall 19-1-A Jail Farm, 7-4n-16w, abandoned; T.D. 7,768 ft.; formation 3,885 ft. siltstone and shale; 5,012 ft. gray sand and shale; 5,759 ft. shale with 45° dips, 6,599 ft. hard Pliocene shale; 7,203 ft. hard Miocene shale; 7,768 ft. fractured brown shale; formation showed number of vertical fractures between 7,500 ft. and bottom.

Del Valle, Los Angeles County: Havenstrite, R. E. 4 Lincoln, 16-4n-17w, flowed 1,080 bbl., 34.9-gravity, 0.3 per cent cut, 800,000 cu. ft. gas, 38/64-in. bean, pressures 450/900 lb., T.D. 6,170 ft., perf. 6,042-6,169 ft.; completed in Modelo zone of Miocene age.

Newhall-Potrero, Los Angeles County: Barnsdall 23 R.S.F., 27-4n-17w, flowed 1,415 bbl., 33.1-gravity, 0.2 per cent cut, 350,000 cu. ft. gas, 42/64-in. bean, pressures 400/700 lb., T.D. 7,457 ft., perf. 7,161-7,455 ft.; completed in Modelo of Miocene age; top of third Modelo zone 7,208 ft.

Santa Maria Valley, Santa Barbara County: Signal O. & G. Co. 4 Newlove, 26-10n-34w, pumped 400 bbl., 16.1-gravity, 4 per cent cut, T.D. 4,574 ft., perf. 4,098-4,568 ft.; completed in Santa Maria zone.

Ventura Avenue, Ventura County: Alliance Pet. Co. 4 Hisey, 21-3n-23w, flowed 1,164 bbl., 32.4-gravity, 5 per cent cut, 1,250,000 cu. ft. gas, 50/64-in. bean, pressures 725/800 lb., T.D. 9,266 ft., perf. 8,506-8,718 ft., 8,735-8,978 ft.; 9,000-9,190 ft.; completed in deepest Pliocene zone.

Associated 48 V.L.&W., 23-3n-23w, flowed 947 bbl., 29.6-gravity, 2.5 per cent cut, 872,000 cu. ft. gas, 128/64-in. bean, pressures 100/250 lb., T.D. 9,879 ft., 300-mesh perf. 9,440-9,879 ft.; completed in deepest Pliocene zone.

### COASTAL DISTRICT COMPLETIONS

Aliso Canyon district, Los Angeles County: Associated 1 Mission, 26-3n-16w, drilling 313 ft. in sand; elev. 2,710 ft.

Castaic district, Los Angeles County: Texas Co. 1 Newhall Land & Farming, 11-4s-17w, location staked and ground being prepared.

Elwood district, Santa Barbara County: Barnsdall-Richfield 88-12 State, Tideland, drilling 2,995 ft. in sand and shale; elev. 21 ft.

Loma Grande district, Monterey County: Loma Grande Oil Co. 1 Corey, 23-24s-10e, T.D. 3,790 ft. in shale, fishing drill pipe; elev. 1,500 ft.

Los Flores district, Santa Barbara County: Standard 2 Los Flores, 27-9n-33w, drilling oil sand and shale 6,264 ft.; shows considerable gas; elev. 1,084 ft.

Newhall district, Los Angeles County: Aztec Oil Co. 1 Sanborn, 6-3n-16w, T.D. 4,300 ft. in sandy shale; to move in heavier equipment; elev. 1,516 ft.

Kenneth Oil Prod. Co. 1 Shepherd, 34-4n-15w, drilling 1,030 ft. in sand; elev. 2,000 ft.

St. Anthony Oil Co. 1 La Salle, 10-3n-16w, drilling in sand 4,494 ft., showing oil and gas; elev. 1,480 ft.

Tunnel Oil Co. 1 Needham, 13-3n-16w, drilling 56 ft. in sand, expect production around 1,550 ft.; elev. 1,681 ft.

Young, R. W. 1 Walker, 11-4n-16w, drilling 1,368 ft. in hard sand, oil and gas shows on ditch; elev. 1,254 ft.

Rincon, Ventura County: C.C.M.O. 9-C Hobson, 17-3n-24w, T.D. 9,338 ft. in sandy shale; redrilling 8,292 ft., lower part of first hole because of mechanical difficulties; elev. 49 ft.

San Martinez district, Los Angeles County: Bankline Oil Co. 1 Videgain, 17-4n-17w, drilling 914 ft. in sand and shale; elev. 1,750 ft.

Standard 1 Sepulveda, 17-4n-17w, rig.

Ohio 1 Vasquez, 17-4n-17w, rig; elev. 1,718 ft.

Towsley Canyon, Los Angeles County: Barnsdall and Ambassador 1 Limebocker, 17-3n-16w, rigging up and preparing to spud.

## North Louisiana, Arkansas

*(Continued from Page 55)*

pected to await a ruling by the Arkansas Oil and Gas Commission setting well units. A hearing has been called this week, and the spacing may be set shortly. Wider spacing is also under consideration for the Dorcheat field which produces what is considered to be gas-condensate, but has been developed to date on a 40-acre pattern.

A new Smackover wildcat test near the town of Wesson, was staked last week by Delta Drilling Co. It is 1 Pickering, 32-18-16, Union County, located on a geophysical prospect. Current wildcatting to the Smackover is taking place in the western end of the trend. Two Lafayette County tests, drilling for Ohio Oil Co. and Tide Water Associated and Seaboard Oil companies are under way and the latter is approaching critical depth.

### ARKANSAS COMPLETIONS

**Fields**

Troy, Nevada County: Benedum & Trees 9 Fincher, NE NE SE 10-14-20, pumped 35 bbl., T.D. 2,188 ft., 7-in. casing 2,182 ft., Tokio.

El Dorado, Union County: Anthony & Co. 2 Union Saw Mill, SW SE NE 15-18-14, dry, T.D. 2,253 ft.

Smackover, Union County: J. D. Reynolds 4-B Laney heirs, SW NW 8-16s-16w, T.D. 2,690 ft., salt water, 4-in. casing 2,690 ft.

### ARKANSAS WILDCATS

Clark County: Coker, Christman & Grieves 1 Williams, NE NE NE 7-11-20, W.O.C., squeezed 1,382-84 ft.

Coker, Grieves et al 2 Williams, NE NE 7-11-19, W.O.C. 605 ft.

Columbia County: L. L. Prock 1 Young, NE SE 21-15-21, drilling 2,525 ft.

Howard County: DeGrazier et al 1 Dierks Lumber Co., SW SW 7-8s-28w, S.D. 580 ft.

Lafayette County: Ohio Oil Co. 1 Garner, NW SW 13-16s-24w, W.O.C. 2,490 ft.

Tide Water and Seaboard 1 Moore, SW SE 29-17s-24w, drilling 7,056 ft.

Lee County: Stanley A. Thompson 1 Comer, NE NE NE 17-3n-2e, drilling 2,485 ft.

Lonoke County: A. V. Riley 1 J. T. Gunter, SE SE SE 17-5n-10w, S.D. 3,066 ft.

Ouachita County: Theodore Davis 1 Fort Smith Timber & Land Co., NW SW 16-12-17, S.D. 35 ft.

Prairie County: Alvin E. Stark 1 Fidelity Mutual, NE NE SW 16-2n-6w, drilling 1,300 ft.

Saline County: A. W. Givens 1 Williams, NW NE NE 18-3s-15w, S.D. 1,090 ft.

St. Francis County: D. T. Hargraves, trustee 1 Peters, NE NE NE 21-4n-1w, drilling 2,440 ft.

### NEW ARKANSAS WILDCATS

Union County: Delta Drilling Co. 1 Pickering, SE NW 32-18s-16w, location.

### EAST TEXAS BORDER WILDCATS

Cass County: W. A. Patterson 1 Orr, G. W. Morris Sur., S.D. 2,280 ft.

Harrison County: Capps Bros. 1 H. L. Eldridge, Joel B. Crain Sur., set surface casing 203 ft.

M. T. Saye 1 W. L. Blocker estate, M. S. Ussury Sur., S.D. 40 ft.

Marion County: W. M. Blackshear 1 S. Chatton, I. N. Jones Sur. 215, drilling 2,487 ft.

A. H. Carpenter 1 T. G. Allen, Robt. Potter Sur., T.D. 2,605 ft., pumping salt water, slight show oil.

Sabine County: Sturm & Womack 1-A Keith, L. Groce Sur., perf. 4,383-84½ ft., T.D. 6,925 ft., swabbing brackish water, show gas.

San Augustine County: Roper & Todd 1 Long Bell, N. Hyden Sur., fishing, T.D. 5,063 ft.

BUCYRUS ERIE
36-L
SPUDDER will pull 4200 pounds of tools from 3000 feet . . .
in 8 minutes
The bull reel is gear driven, free wheeling, with two speeds forward and one reverse. The 13⅛" steel barrel is 44½" long with 45" diameter steel flanges. Located at each end are big, wide brakes — two of them with equalizer — each 42" by 6". Bands are faced with ½" asbestos blocks giving smooth, accurate control. Spooling capacity without divider for 4,900' of 1", 6,900' of ⅞", 9,400' of ¾" wire line. Divider reduces capacity approximately 6%. Hoisting capacity to 28,900 lbs. in low gear, 13,300 lbs. in high gear. Average line speed 375 ft. per minute in high gear.
CAPACITY To 28,900 lbs.
BIG TWIN BRAKES
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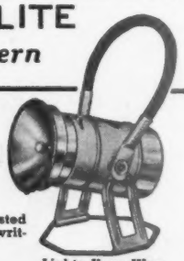

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**ECONOMY ELECTRIC LANTERN CO.**

3100 W. CHERRY ST. MILWAUKEE, WIS.


## West Central Texas Fields

*(Continued from Page 59)*

**Three New Wildcat Operations Under Way**

*COLEMAN COUNTY.*—Murray R. Hart, Fort Worth, has staked location in Coleman County for a 2,000-ft. test, 1 Mrs. P. P. Seale, SE cor. of an 80-acre tract in the E. N. Eubanks Survey 270, about 4 miles south of the town of Echo.

*JONES COUNTY.*—Fain-McGaha Oil has staked location for a wildcat as 1 W. H. Hollis, NW cor. Section 26, Block 15, T.&P. Survey, 4½ miles west of the Lewis-Steffens field. It is contracted to 2,500 ft. and is about 1½ miles northeast of several Gunsight lime failures which found encouraging shows of oil.

To be the deepest wildcat drilling on the eastern flank of the Bend arch, Somervell County's 7,500-ft. wildcat operation by Plymouth Oil Co. is progressing below 4,203 ft. It is 1 Cousins, in the eastern part of the tract in the John Echols Survey, 2 miles south of Glen Rose. Temporarily halted for engine repairs at 4,203 ft., it is expected to be drilling by the first of the week.

### WEST CENTRAL TEXAS COMPLETIONS

**Wildcats**

Callahan County: L. A. Warren 1-B Clinton, 150 ft. from S and 450 ft. from W lines of SE Sec. 15, B.O.A. Sur., dry at 537 ft.

Jones County: M. J. Delaney 1 Short, Sec. 191, B.B.B. &C. Sur., 199 bbl. in 10 hr., ½-in. choke, est. 250 bbl. daily, 3,240-3,245 ft.

Shackelford County: R. H. Roark 1 Diller Bros., 1,170 ft. from SE and SW lines Sec. 564, T.E.&L. Sur., dry at 1,077 ft.

E. Gillespie 1 Robinson, 1,700 ft. from W and 1,600 ft. from S lines Sec. 43, B.A.L. Sur., dry at 701 ft.

**Fields**

Albany, Shackelford County: Stanfield & Tubbs 5 Clark, 4 bbl. in 24 hr., 616-22 ft.

Buff Creek, Shackelford County: Fain-McGaha 4 Morris, 81 bbl. in 24 hr., natural, 1,498-1,503 ft.

Westex Oil 1 Morris B, 6 bbl. in 24 hr., 10-qt. shot, 1,563-68 ft.

Brownwood Gas, Brown County: Hightower Oil & Ref. 2-B Buckner's Orphans Home, 1,500,000 cu. ft. gas daily, 3,000 gal. acid, 1,438-1,560 ft.

**Miscellaneous Pools**

Jones County: J. S. Sprouls & Co. 3 Nichols, dry at 2,145 ft.

### WEST CENTRAL TEXAS ACTIVE WILDCATS

Callahan County: J. D. Kynaston 1 Seale, 868 ft. from S and 1,859 ft. from W lines J. H. Brown Sur. 254, 1,000-ft. cable-tool test, S.D. 40 ft., orders.

P. H. Lowellyn 1 McLain, 1,700 ft. from E and 200 ft. from N lines A. Cherry Sur. 332, 600-ft. cable-tool test, location.

W. B. Schooler 1 Betcher, 330 ft. from N and W lines Sec. 7, Blk. 6, S.P. Sur., 2,500-ft. cable-tool test, first report.

O. L. Wylie 1 Taylor, 700 ft. from W and 350 ft. from N lines SE Sec. 67, B.O.A. Sur., 600-ft. cable-tool test, location.

Coleman County: McMillan & Rominger 1 Wilkerson, 1,570 ft. from N and 257 ft. from W lines Sec. 3, Blk. 2, G.H.&H. Sur., 2,800-ft. test, drilling 2,520 ft.

States Oil Corp. 1 O. B. Featherstone, 467 ft. from N and W lines M. J. Gable Sur. 118, 3,600-ft. rotary test, waiting on cement at 3,600 ft.

States Oil 1 Frank Hudson B, 467 ft. from S and 1,401 ft. from W lines N½ Sec. 22, Blk. 8, T.&N.O. Sur., 3,500-ft. rotary test, drilling 3,100 ft.

States Oil 1 Sealy & Smith, NE 160 acres of J. Greenwood Sur. 304, P.B. to 3,400 ft., 40-qt. shot 2,977-95 ft., slight oil show, prep. to P.B. to 2,650 ft.

Comanche County: C. D. Lane 1 Auvenshire, 600 ft. from W and 150 ft. from S lines NE Sec. 45, E.T. Sur., 1,000-ft. cable-tool test, location.

O. L. Stutenroth 1 Pearl Kirk, 660 ft. from N and 2,820 ft. from S lines John Talbot Sur. A-941, 2,800-ft. test, testing at 2,629 ft.

Concho County: C. M. Joiner Leasing Corp. 1 Armor, 1,315 ft. from S and 330 ft. from W lines Sec. 105, Blk. 72, T.&N.O. Sur., old well drilling deeper, old T.D. 1,565 ft., drilling 2,530 ft.

Eastland County: Bryan & Stewart 1 Hall, 330 ft. from N and E lines Sec. 46, Blk. 2, H.T.&B. Sur., setting casing, T.D. 2,654 ft.

Dobbs Oil 1 L. A. Hightower, NE SE Sec. 4, Blk. 3, H.&T.C. Sur., T.D. 3,310 ft., prep. to P.B.

Stewart Oil 1 Shaeffer, 660 ft. from E and 1,980 ft. from S lines 394-acre farm in Moses Allen Sur. 26, 3,500-ft. test, rigging up spudder.

Fisher County: P. R. Long 1 Maberry, SE cor. A. A. Soring Sur., 2 mi. SW of McCaully, drilling out 3,278 ft., prep. to perf. liner.

Minerals Research 1 C. C. Prather, 660 ft. from S and 467 ft. from E lines Sec. 53, Blk. 1, H.T.&B. Sur., drilling 2,640 ft.

Shell 1 Vaughn, 467 ft. from N and 1,787 ft. from W lines Sec. 205, Blk. 21-V, H.&T.C. Sur., 7,250-ft. test, drilling 235 ft.

Hamilton County: Lone Star Gas 1 Burks, 1,654 ft., from NE and 1,175 ft. from NW lines James Hays Sur. 16, 3,000-ft. test, S.D. 2,712 ft., orders.

Jones County: Butler & Horne Drlg. Co. 1 Wimberly, 330 ft. from S and W lines of 200-acre farm in Guadalupe Martinez Sur., 2,700-ft. test, drilling 75 ft.

T. J. Coyne 1 L. E. Clyburn, NW cor. tract in Lots 24 and 27, Holt subd. of Henry Millard Sur. 243, 2,000-ft. test, S.D. 1,730 ft.

Danciger Oil & Ref., Inc., 1 E. H. Reeves, 330 ft. from W and 1,600 ft. from S lines of 460½-acre farm in E½ Maria Rita Longoria Sur. 258, 2,600-ft. test, drilling 1,565 ft.

T. D. Humphrey 1 Mary L. Triplett, 3,050 ft. from N and 330 ft. from W lines Jas. Goocher Sur. 199, 2,500-ft. cable-tool test, drilling 1,840 ft.

S. B. Roberts 1 Cooper, SE SE SW Sec. 20, Blk. 15, T. P. Sur., P.B. to 4,865 ft., pumping 1½ bbl. oil and 16 bbl. water per day, T.D. 4,919 ft.

Mills County: Three Widows Oil 1 Burdett, 467 ft. from N and W lines Lot 59, Hayes C.S.L. Sur., 3,000-ft. test, drilling 2,401 ft.

Shackelford County: F. A. Aikin 1 Shotwell, 1,520 ft. from E and 1,020 ft. from S lines Sec. 55, Blk. 14, T.P. Sur., first report.

Aragon Oil 1 Walls Pasture, SW cor. Sec. 39, B.A.L. Sur., 4,000-ft. test, running 7-in. casing to 3,577 ft.

Eason Oil 1 Nail, 220 ft. from S and W lines Sec. 125, E.T. Sur., 1,500-ft. cable-tool test, running 5½-in. casing to 1,857 ft.

R. H. Roark 1 Elliott, SW SW SE Sec. 9, L.A.L. Sur., 5,000-ft. test, tested 2,500,000 cu. ft. gas, blew tubing loose, fishing tubing.

Somervell County: Plymouth Oil 1 Cousins, 456 ft. SE and NE lines of tract in John Echols Sur., 7,500-ft. test, drilling 3,900 ft.

Stephens County: T. S. Schroeder 1 Corbett, 2,200 ft. from E and 444 ft. from N lines Sec. 12, Blk. 3, S.P. Sur., drilling 1,815 ft.

Stonewall County: Shell 1-A Patterson, 1,650 ft. from N and 990 ft. from W lines Sec. 357, Blk. D, H.& T.C. Sur., Ellenburger test, drilling plug to 2,040 ft.

Taylor County: Ce-Beth Oil 1 City of Abilene, south shore of Lake Abilene on city property, S.D. 4,011 ft.

Lewis Prod. 1 Huddleston, 330 ft. from N and W lines Lot 6, Grimes County School Lands Sur. 124, 2,850-ft. test, first report.

McQueen & Clevenger 1 W. G. Drummond, 467 ft. from S and 250 ft. from W lines Sec. 1, T.&N.O. Sur., drilling 2,434 ft.

## Kentucky Fields

*(Continued from Page 56)*

eastern Kentucky spotlight this week with five oil wells and eight gas wells being drilled in. The five oil wells have a combined daily production of 28 bbls. while the gas wells have a combined daily flow of 3,635,000 cu. ft.

The Kentucky-West Virginia Gas Co. has made seven new locations in Floyd and Knott counties and now has over 40 operations under way in the eastern Kentucky area.

Johnson County operations continue to move forward and are holding considerable attention in view of the recent gas developments in that region.

Powell County has the five oil well completions. They were:

Floyd Fitch 1 Margaret Hall on South Fork, testing good show.

Lawton Hedrick 1 John Parsley on Miller's Creek, 3 bbl.

Joe T. Brown, treasurer, 1 Matt Lawery, 5 bbl.

Pilot Properties 1 M. Townsend on South Fork, 5 bbl.

Agatha Wireman 5 Robert Boyd at Sand Lick, 15 bbl., T.D. 860 ft.

The Kentucky-West Virginia Gas Co. reported the completion of the eight gas wells, five in Floyd County and three in Knott County. These completions are as follows:

Floyd County: No. 632 M. A. Davidson, Daniels Creek, T.D. 1,453 ft., 2,531,000 cu. ft. gas, Big lime, 260 lb., 12 hr.

No. 623 Nelson Boyd, Hunts Fork of Frazier Creek, T.D. 2,891 ft., 73,000 cu. ft. from Big lime, 437 lb., 58,000 cu. ft., shale, 188 lb., 40 hr.

No. 629 Joseph Hall, T.D. 2,820 ft., 332,000 cu. ft., shale, 275 lb., 8 hr.

No. 5305 John Hamilton, T.D. 3,651 ft., 112,000 cu. ft., shale, 378 lb., 48 hr.

No. 5314 A. R. Music, T.D. 2,508 ft., 146,000 cu. ft. from Big lime, 385 lb., 84,000 cu. ft. shale, 170 lb., 8 hr.

Knott County: No. 5306 Levisa Thacker, Mill Creek, T.D. 84,000 cu. ft., 40 lb., 1 hr.

No. 5308 William Tripplett, Long Fork of Johns Branch, T.D. 2,833 ft., 112,000 cu. ft., shale.

No. 5312 A. Johnson, T.D. 2,888 ft., 103,000 cu. ft., 340 lb., 48 hr.

### WESTERN KENTUCKY

**Daviess County**

Handyville district: J. C. Ellis 1 fee, flowed 500 bbl., McClosky 1,723-25 ft., old T.D. 1,703 ft., a 3-bbl. a day pumper before deepening.

A. D. Schaffer et al 1 S. A. Burns, moving in.

Utica district: Daugherty 7 J. A. Leet, Jett pressure well, T.D. 1,168 ft.

Red Hill district: Farmer et al 2 W. C. Yeiser, dry, T.D. 1,310 ft.

Birk City district: Sargent et al 1 Flora G. Wahl, dry, T.D. 1,970 ft.

Whitesville district: Paulamous 1 R. Thompson, dry, T.D. 745 ft.

**Henderson County**

Hebbardsville district: Hupp et al 6 Otto Busby (King Pruitt Min.) abandoned location.

Hupp et al 1 Harry Burns, drilling 175 ft.

**McLean County**

Calhoun district: Wanna Oil Co. 4 Ohio Valley Oil Co., dry, T.D. 500 ft.

**Ohio County**

Fordsville district: O. D. Vickers et al 7 Betty Cullen, dry, T.D. 415 ft.

M. P. Evans et al 1 Luther Neal, drilling 280 ft.

Pattyville district: Murphy & Alvey 6 Bonnie Walker, 10 bbl., shot 50 lb., gelatine, Jett sand 242-63 ft., T.D. 275 ft.

Taffy district: E. L. Coriass 1 L. C. Hoover, 10 bbl., 20-qt. shot, Jett sand 430-39 ft., T.D. 451 ft.

Aetnaville district: McGinley et al 6 S. F. Whiteley, drilling 150 ft.

# New Pool Opened in Barton County, Two in Russell

By ROBERT INGRAM

PRODUCTION from Kansas was still climbing last week as the Conservation Division of the state Corporation Commission announced that the August daily allowable would be upped 5,400 bbl. to 242,800 bbl., the fifth successive new high for the state. The new allowable is about 2,000 bbl. under what Theo A. Morgan, conservation engineer, estimates as the state's current pipe-line capacity (see The Oil and Gas Journal, July 24, p. 16).

In spite of the steadily increasing production, however, drilling showed no marked increase and fewer wildcats than usual were started (see below). Present operations were obviously sufficient to maintain the necessary new production along with some relaxing of the strict prorated allowables.

Russell County continued to provide the lion's share of the new production and last week appeared to have two more pools. Central Petroleum Co. 1 Steinlie, N½ NW NE 29-15-12w, filled 1,800 ft. with oil in 6 hours from the Arbuckle topped at 3,318 ft. and drilled to 3,320 ft. where operations were halted to run 5-in. casing for a production test. The hole was drilled with cable tools. The well is 1½ miles west of the Dubuque pool, another recently opened area.

The same operators had a good show at 1 Gustason, SE NW 14-15-12w, 3 miles southeast of the Greenvale pool. There oil rose in the hole at the rate of 12 bbl. an hour to 1,350 ft. after the plug was drilled at 3,245 ft. in the Arbuckle topped at 3,244 ft. Operators will not acidize but will run tubing to take a natural pumping test. The oil tested 39 gravity.

Mercury Drilling Co. owns a fourth interest in the test, and offset acreage is held by Skelly Oil Co., Phillips Petroleum Co., Cities Service Oil Co. and Stanolind Oil & Gas Co.

### New Pay Zone Added At Rick Pool

The Rick pool of eastern Barton County, now producing from the Arbuckle, was opened to Lansing-Kansas City lime production last week by Shell Oil Co., Inc. 1 Rader, NE NE 11-19-11w, an old well plugged back from the Arbuckle at 3,392 ft. The hole was plugged back to 3,242 ft. and 7-in. casing was perforated with 60 holes from 3,106-20 ft. On a swabbing test the well made 79 bbl. of oil and 13 bbl. of water in 8 hours. It was treated with 3,000 gal. of acid and then flowed 603 bbl. of oil and 38 bbl. of basic sediment in 8 hours and was given an official potential of 180 bbl. a day on a swabbing test.

### Area Around New Pawnee Rock Pool Gets New Wells

One of the newer areas extending west of the main trend along the Barton arch—limited on the west by the Pawnee Rock pool in Pawnee County—had a new pool last week in the northwestern corner of Barton County at Helmerich & Payne 1 Unruh, E½ NE NW 16-20-15w, which flowed 50 bbl. of oil a day from the Arbuckle with packer set at 3,795 ft. The well was drilled to a total depth of 3,805 ft. and treated with acid to increase the flow of 27 bbl. in 20 hours natural to 50 bbl. in 24 hours.

The new pool is northeast of Pawnee Rock, one of the most successful 1940 discoveries. Already there are 16 producing wells in the pool and last week another was completed and put on production (see completions).

## KANSAS COMPLETIONS

### Wildcats

Simpson 1 Snowbarger . . . . . SW SE NE 21-23-10w Flowed 45 bbl. an hr. for 2 hr. through 1-in. choke on 2-in. tubing, bomb potential 7,510 bbl., given maximum 3,000 bbl. potential 250,000 cu. ft. gas, Viola 3,722 ft., 5-in. 3,776 ft., T.D. 3,789 ft., *opens Peace Creek pool,* Reno County.

Archie 1 Schroeder . . . . . SE SW 28-9-20e Estimated 350,000 cu. ft. gas and 20 bbl. oil, 21.3 gravity, Mississippian lime 1,468-72 ft., 7-in. 1,442 ft., T.D. 1,472 ft., P.B. 1,468 ft., shot, *probable extension to McLouth pool,* Leavenworth County.

Stanolind 1 Black . . . . . W½ NE SW 25-24-12w Dry, T.D. 4,140 ft., Viola 3,929 ft., Simpson 4,029 ft., Arbuckle 4,098 ft., Stafford County.

Larlo Oil 1 Lynch . . . . . S½ SE SW 24-4-20w Dry, T.D. 3,848 ft., Arbuckle 3,470 ft., Basal sand 3,812 ft., slight show oil in Lansing 3,168-3,381 ft., Phillips County.

Cities Service 1 Federal farm . . . . SE SE SE 15-4-23w Dry, T.D. 3,749 ft., Lansing 3,493 ft., show oil, granite 3,792 ft., Norton County.

Brazil et al 1 Hilliard . . . . . NE NE NW 27-27-11e Dry, T.D. 100 ft., Greenwood County.

### Fields

Atherton, Russell County: R. H. Shields 2 Winter, E½ NW SE 19-13-14w, 750 bbl., Arbuckle, acid, T.D. 3,288 ft.

Bedford, Stafford County: Cities Service 1 Knoche, NW NW SE 28-23-12w, 2,235 bbl., Arbuckle, T.D. 3,847 ft.

Bemis, Ellis County: Cities Service 6 Collahan-B, NE SW 25-11-17w, 3,000 bbl., Arbuckle, acid, T.D. 3,429 ft.

Bowman, Rice County: I. W. Murfin 1 Jochems, EL NE SW 16-19-10w, dry, T.D. 3,369 ft.

Burnett, Ellis County: Champlin 2 Mock, NE SW NE 17-11-17w, 267 bbl., Arbuckle, acid, T.D. 3,359 ft.

Coralena, Russell County: Leader 6 Meharg, SE SE 17-15-13w, 546 bbl., Kansas City lime, T.D. 3,009 ft. Stanolind 1 Letsch, S½ SW SE 4-15-13w, 3,000 bbl., Kansas City lime, acid, T.D. 3,067 ft.

Couch, Cowley County: Ryan 3 Kennedy, NW SE SW 12-30-5w, 1,548 bbl., Bartlesville, T.D. 2,846 ft.

Cowley, Cowley County: Leader 8 Moon, SW SW 16-32-5e, 50 bbl., Bartlesville, T.D. 3,080 ft.

Cunningham, Pratt County: Drillers 1 Gerber, E½ E½ 35-27-11w, 157 bbl., Lansing-Kansas City, T.D. 3,750 ft.

Frog Hollow, Cowley County: Phillips 1 Lena, SE SE 17-32-5e, 168 bbl., Bartlesville, T.D. 3,068 ft.

Gibson, Cowley County: Sinclair Prairie 1 Shurtz, SW SW NE 29-34-3e, 315 bbl., Bartlesville, T.D. 3,391 ft.

Greenvale, Russell County: Phil-Han 1-A Kaufman, NW NE NW 10-15-12w, dry, T.D. 3,264 ft.

Hall-Gurney, Russell County: Cities Service 2 Rogg-B, W½ SW SE 20-14-13w, dry, T.D. 3,242 ft.

Hoffman, Barton County: Armer 2 Hoffman, E½ NW SW 18-16-11w, 530 bbl., Arbuckle, acid, T.D. 3,334 ft.

Hugoton, Stevens County: Kuhn Brothers 1 Youngren, SW SW NE 1-32-39w, 36,000,000 cu. ft. gas, T.D. 2,600 ft., workover.

Koblitz, Ellis County: Lesback 2 Stackhouse, NW SW 23-12-18w, 550 bbl., Arbuckle, T.D. 3,658 ft.

Kraft, Barton County: Magnolia 2 Grosshardt, Sec. 9-17-11w, 142 bbl., Arbuckle, T.D. 3,309 ft. Carter 4 Hogan, E½ E½ NW 11-17-11w, 2,121 bbl., Arbuckle, acid, T.D. 3,345 ft.

Laton, Rooks County: Broadview 8 Beardmore, NE NE SW 2-9-16w, 351 bbl., Kansas City lime, acid, T.D. 3,257 ft.

McLouth, Leavenworth County: Longwell 2 McLeod, NE SW 3-10-20e, 50 bbl., Bartlesville 1,387 ft., T.D. 1,420 ft. J. B. Apperson et al 1 McLeod, NE SE SE 5-10-20e, 350,000 cu. ft. gas, Burgess 1,478-84 ft., T.D. 1,649 ft. Magnolia 1 Harris, SW SE 32-9s-20e, 12,000,000 cu. ft. gas, Bartlsville sand, 1,430 ft. Joe Longwell 1 Bartlett Mortgage, NW SE 33-9s-20e, 5,500,000 cu. ft. gas, Bartlesville sand, T.D. approximately 1,450 ft.

Pawnee Rock, Pawnee County: Amerada 1 Bowyer, S½ SE SW 12-20-10w, 3,000 bbl., Arbuckle, acid, T.D. 3,844 ft.

West Prusa, Barton County: Gulf 1 Schnewies, N½ NE NE 7-17-11w, 50 bbl., Arbuckle, T.D. 3,338 ft.

Ray, Phillips County: Cities Service 2 Vehige, NE SW SW 28-5-20w, 1,332 bbl., Arbuckle, acid, T.D. 3,595 ft.

Raymond, Rice County: Hyde & Stormfeltz 3 Specht, E½ NW SW 16-20-10w, 3,000 bbl., Kansas City lime, acid, T.D. 3,147 ft. Vickers 3-B Bayer, S½ NW NW 20-20-10w, swabbed 158 bbl., Kansas City lime, acid, T.D. 3,201 ft.

Rick, Barton County: Shell 1 Rader, NE NE 11-19-11w, 180 bbl., Kansas City lime, acid.

Rock, Cowley County: Stetbar 2-A Joslin, SW NE 21-30-4e, 440 bbl., Bartlesville, T.D. 2,828 ft.

Roxbury, McPherson County: Westgate-Greenland 1 Bethany College, SE SW 19-17-1w, 50 bbl., chat, T.D. 2,710 ft.

Shaeffer, Stafford County: Bodine et al 1 Wilcutt, NW SE SE 4-21-13w, 2,910 bbl., Kansas City lime, acid, T.D. 3,413 ft.

Stafford, Stafford County: Cities Service 1 Byers, Sec. 10-24-12w, 531 bbl., Viola, T.D. 3,841 ft.

Stoltenberg, Ellsworth County: Herndon 1 Jezek, E½ SE SE 7-16-10w, swabbed 48 bbl., Arbuckle, acid, T.D. 3,375 ft. Cities Service 3 Kralick, S½ NW NW 8-16-10w, 3,000 bbl., Arbuckle, acid, T.D. 3,319 ft.

Trapp, Russell County: Cities Service 7-D Krug, SW NW SE 24-15-14w, 1,069 bbl., Arbuckle, acid, T.D. 3,343 ft. Shell 1-B Sausen, SE NW SE 12-16-14w, 2,338 bbl., Arbuckle, acid, T.D. 3,369 ft.

West Trapp, Russell County: Phillips 2 Maier, NW NE 15-15-14w, 270 bbl., Arbuckle, acid, T.D. 3,224 ft. Braden-McClure 1 Resner, SE SW NE 23-15-14w, 86 bbl., Arbuckle, T.D. 3,369 ft.

Zenith, Stafford County: Stanolind 10 Richardson, W½ NW SW 10-24-11w, 1,455 bbl., Viola, acid, T.D. 3,829 ft. Magnolia 6 Tretbar, N½ SE NE 12-24-11w, 377 bbl., Misener, T.D. 3,735 ft.

### Miscellaneous

Butler County: Bisagno 3 fee, N½ NE SE 35-26-5e, dry, T.D. 3,232 ft.

Cowley County: Pryor & Lockhart 1 V. W. Hall, S½ SE NE 6-33-6e, dry, T.D. 3,534 ft.

Greenwood County: Phillips 84 Demalorie-Souder, NW SW SE 2-22-10e, 8 bbl., Bartlesville 2,075 ft., T.D. 2,126 ft. Oko Oil 20 Shedel, NE SW SE 15-23-13e, 120 bbl., Mississippian lime 1,773-1,805 ft., T.D. 1,805 ft. Shaffer & Howell 22 Schneider, NW SE NW 15-23-13e, 6 bbl., Mississippian lime 1,760 ft., T.D. 1,784 ft.

Woodson County: Oko Oil 7 Hoagland, SE SE SE 35-23-14e, 1 bbl., Mississippian lime 1,607 ft., T.D. 1,648 ft.

## SUMMARY OF COMPLETIONS

***Kansas***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Burnett | 1 | 267 | 3,359 |
| Coralena-Trapp | 4 | 6,953 | 12,738 |
| Stoltenberg | 2 | 3,048 | 6,694 |
| Zenith | 2 | 1,832 | 7,564 |
| Other pools | 29 | 23,579 | 89,061 |
| Wildcats | 2 | 3,020 | 5,261 |
| Gas wells: Fields | 4 | *53.9 | 7,129 |
| Dry holes: Fields | 6 | ..... | 19,975 |
| Wildcats | 4 | ..... | 11,837 |
| Total | 53 | ..... | 160,738 |

***Iowa***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Dry holes: Wildcats | 3 | ..... | 4,249 |

***Missouri***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Dry holes: Wildcats | 1 | ..... | 1,500 |

*Million cu. ft.

## WILDCAT DRILLING REPORT

### Western Kansas

Barber County: Pryor & Lockhart 1 Ishmael, S½ SE SW 35-34-11w, good stain 4,698-4,709 ft., base Mississippi 4,764-4,815 ft., 7-in. 4,612 ft., Simpson 5,142 ft., Wilcox 5,298-5,335 ft., slight stain, Arbuckle 5,339-54 ft., T.D., will P.B. to Mississippian. Deep Rock 1 Skinner, W½ NW SW 21-31-14w, first report.

Barton County: Helmerich & Payne 1 Unruh, E½ NE NW 16-20-15w, Arbuckle 3,720 ft., 5-in. 3,725 ft., 250,000 cu. ft. gas at 3,750-54 ft., est. 1,250,000 cu. ft. gas 3,784 ft., T.D. 3,791 ft., small spray oil, acid, flowed 27 bbl. in 20 hr., T.D. 3,805 ft., acid below 3,785 ft., packer 3,795 ft., flowed 50 bbl. a day.

Bartlett 1 Wondra, SE NE NE 5-17-13w, anhydrite 840 ft., drilling 2,015 ft.

Butler County: Adair & Morton 1 Piper, NE NW NE 36-29-4e, 8-in. 2,095 ft., Kansas City 2,227 ft., drilling 2,456 ft.

Cowley County: Mead Production 1 McMichael, NW SW SW 35-33-3e, 8-in. 2,509 ft., drilling 2,690 ft.

Edwards County: Continental 1 Beatty, S½ SW 35-25-20w, drilling 3,398 ft.

Ellis County: Darby 1 Dreiling, SE SE NW 28-13-17w, reworked Arbuckle 3,518 ft., Arbuckle 3,521 ft., spotted saturation 3,527-34 ft., 7-in. 3,521 ft., perf. 3,285-94 ft., acid, bailed 1 bbl. water and 1½ gal. oil. Darby 1 Biebler, E½ NW SE 27-13-20w, first report.

Graham County: Cities Service 1 Gordon, SE NE NW 1-8-22w, spotted shows in Arbuckle at 3,665-70 ft., 4-in. 3,665 ft., heavy black tar 3,686 ft., H.F.W. 3,686-93 ft., T.D., P.B. 3,500 ft., shot 3,428-39 ft., bailed 3 bbl. water, shot 3,439-43 ft., 2,180 ft. water in hole in 13½ hr., squeezed 3,428-43 ft., perf. 3,409-20 ft., oil stain 3,415-16 ft., perf. 3,395-98½ ft., 2,350 ft. water in hole, S.D.

Kearny County: Stanolind 1 Patterson, E½ SE SE 23-22-38w, Lansing 4,100 ft., Cherokee 4,420 ft., top sand 4,740 ft., base sand 4,751 ft., D.S. test 4,740-60 ft., open 20 min., 1,885 ft. oil and 185 ft. muddy water, gravity 35.5 at 78°, Mississippian lime 4,879-4,902 ft., T.D., 7-in. 4,806 ft., cheri 5,380 ft., cored 5,407-13 ft., no recovery, S.D. 5,500 ft.

Norton County: Helmerich & Payne 1 Hewitt, S½ SE NE 11-4-21w, Arbuckle 3,655 ft., granite 3,746 ft., T.D. 3,750 ft., P.B. 3,404 ft. in Lansing, swabbed 65 bbl. in 19 hr., small trace water, gravity 36.8° corercted, acid, swabbed 131 bbl. oil and 87 bbl. water in 14 hr., S.D. 12 hr., 450 ft. oil in hole and 1,850 ft. water in hole, squeezed with 150 sacks, acid at 3,407 ft., swabbed 24 bbl. oil and no water in 2 hr., installing pump. Helmerich & Payne 1 Wyatt, E½ NE NE 20-1-23w, anhydrite 1,890 ft., drilling 3,260 ft.

Rice County: Ingling-Parker 1 Merkle, NE SW 1-20-9w, Lansing 2,900 ft., some show oil 2,910 ft., drilling 2,947 ft.

Rooks County: Cities Service 1 Ervay, SE SE SE 2-10-16w, conglomerate 3,428 ft., Arbuckle 3,485 ft., T.D. 3,495 ft., 4-in. 3,205 ft., bailing mud.

Russell County: Central 1 Gustason, SE NW 14-15-12w, Arbuckle 3,244-46 ft., 5-in. 3,245 ft., T.D. 3,257 ft., 1,350 ft. oil in hole in 3¾ hr., gravity 39°. Central 1 Steinlie, N½ NW NE 29-15-12w, some show oil 3,223-25 ft., 7-in. 3,286 ft., Arbuckle 3,318-20 ft., 1,800 ft. oil in hole in 1½ hr. Ruso 1 Phillips, SE NE NE 6-14-13w, Lansing 3,029 ft., Sooy 3,304 ft., Arbuckle 3,325 ft., cored dolomite, spotted porosity and show oil 3,330-34 ft., 4-in. 3,326 ft., standard tools 3,334 ft.

Scott County: Atlantic 1 Rosine Smith, NE NE 34-19-33w, drilling 4,042 ft.

Sedgwick County: W. S. Fees 1 Bartholomew, N½ NE SW 20-27-4w, surface hole.

*(Continued on Page 76)*

# Ordovician Pay Found South Of Big Lake on Huge Block

By R. MARNE SANFORD

MIDLAND, Tex., Aug. 4.—Twenty miles south and east of the first Ordovician deep pool in West Texas, the old Big Lake field which was discovered in October 1926, another deep Ordovician pool has been opened. The pool opener is Amerada Petroleum Co. 1-RA University, Section 3, Block 48, University Lands Survey.

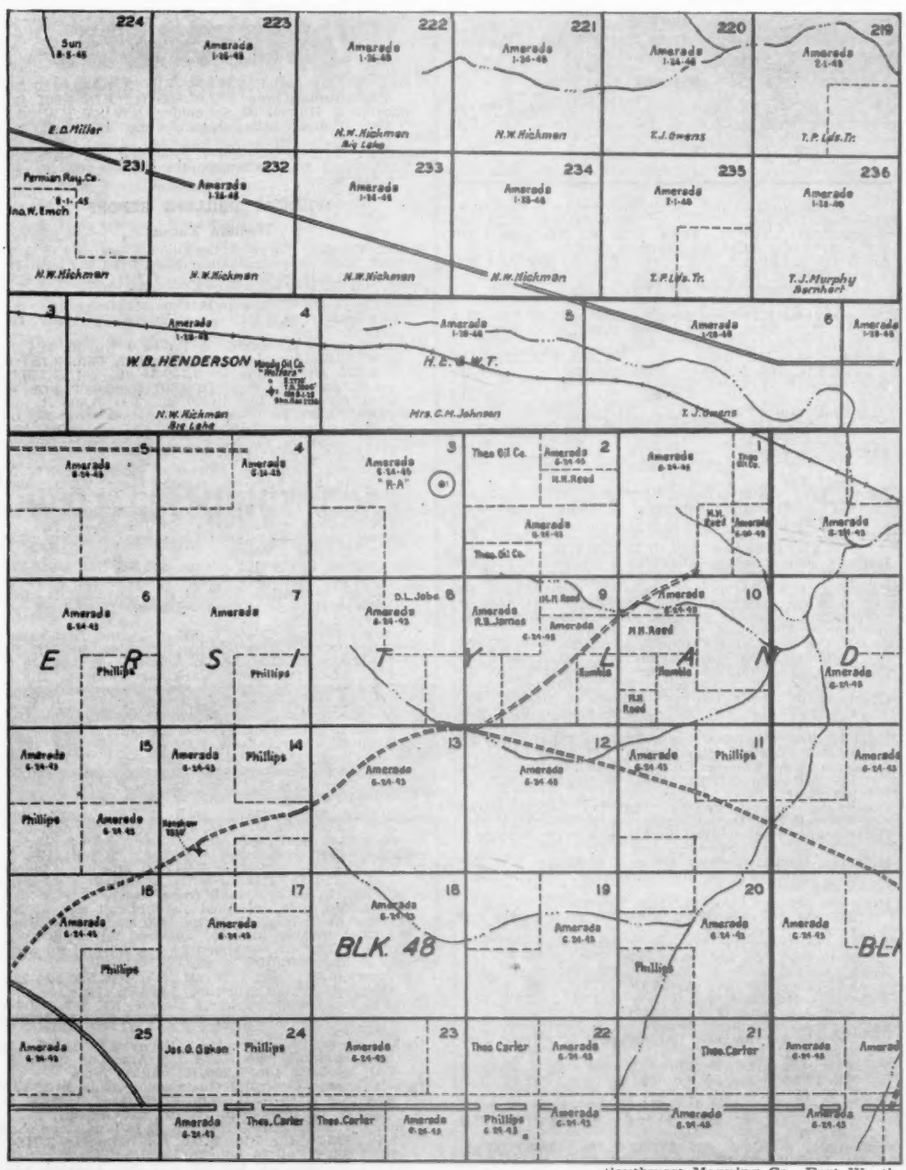
Operators ran 2-in. tubing to 9,070 ft. and swabbed the well in. It reportedly kicked off and flowed light green 43-gravity oil for 10 hours into pits, cleaning itself out before being shut in. Production is natural from the Ellenburger lime. First estimates on the well ran as high as 500 bbl. daily, but later estimates fix the output at around 200 bbl. daily, based on a 4½-hour flow.

With elevation of 2,768 ft., 1-RA University logged base of the black shale at 8,905 ft. It encountered no Simpson or Middle Ordovician, which is found in some of the Big Lake deep wells, but logged a detrital zone, an unconformity, at 8,095 ft. The top of the Ellenburger lime was at 8,960 ft. and the top of the pay at 9,017 ft. Porosity and saturation was found from 9,017-50 ft. and below a break from 9,060-66 ft. Total depth is 9,080 ft.

Location of the wildcat is 1,980 ft. from the north line and 660 ft. from the east line of the section. It is on a block of 24,000 acres in the southeast part of the county which Amerada holds practically solid. Of this block 14,000 acres belong to the University of Texas.

The area is close to pipe lines of the Continental Oil Co. and the Humble Pipe Line Co., thus any future wells are assured outlet.

At the end of the week the well had been shut in for erection of storage and separator.




Southwest Mapping Co., Fort Worth

***Amerada 1-RA University, Reagan County, has opened one of the most promising Ellenburger (Ordovician) fields in West Texas. Late reports rated the official flow of the well at 50 bbl. in 1 hour and 15 minutes. The oil tested 44 gravity and the pay section is between 9,017 ft. and 9,080 ft., total depth. The Ellenburger was topped at 8,960 ft. and tubing was run to 9,070 ft. The discovery is shown here, circled, with the acreage blocked by Amerada***

### East Outpost to Taylor-Link Shows Shallow Production

Three-quarters of a mile east of production in the Taylor-Link lime pool of extreme northern Pecos County, Milton Unger 1 Shell-University is bidding for production from a pay zone higher than the main Taylor-Link pay. The sand corresponds to the producing horizon in the Walker pool, which is a river bed sand of Permian age known as the Queen.

Saturated sand was cored continuously from 1,451-69 ft., total depth, followed by a natural oil rise in the hole estimated at 5 ft. per hour. With 1,000 ft. of fluid in the hole, operators have set 7-in. casing at 1,429 ft. and are preparing to shoot the oil sand.

Location of the outpost is 330 ft. out of the southeast corner of the SE¼ NW¼ Section 33, Block 16, University Lands Survey, approximately 3 miles west of the Walker pool on the White & Baker ranch.

### SUMMARY OF COMPLETIONS

*Southern West Texas*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil: Abell | 2 | 3,170 | 10,902 |
| Foster | 2 | 940 | 8,508 |
| Hutchins | 3 | 1,068 | 9,127 |
| Johnson | 3 | 1,947 | 12,509 |
| Keystone | 3 | 472 | 10,390 |
| North Cowden | 2 | 1,007 | 8,824 |
| Pecos Valley | 2 | 79 | 3,474 |
| Other fields | 11 | 7,985 | 29,346 |
| Dry: Hayes gas | 2 | | 5,738 |
| Wildcats | 1 | | 4,046 |
| Total | 31 | | 102,864 |

*Northern West Texas*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil: Sharon | 2 | 266 | 4,234 |
| Slaughter | 15 | 16,542 | 75,120 |
| Wasson | 4 | 2,313 | 20,860 |
| Other fields | 4 | 750 | 16,004 |
| Dry: Wildcats | 1 | | 5,520 |
| Total | 26 | | 121,738 |

*Texas Panhandle*

| | No. | Prod. | Footage |
|---|---|---|---|
| Oil: Carson County | 2 | 151 | 6,371 |
| Gray County | 9 | 1,987 | 28,131 |
| Hutchinson County | 7 | 2,382 | 21,117 |
| Wheeler County | 1 | 103 | 2,115 |
| Dry: Hutchinson County | 1 | | 3,364 |
| Wheeler County | 1 | | 1,394 |
| Total | 21 | | 62,492 |

*Southeast New Mexico*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 3 | 407 | 10,022 |
| Dry holes: Fields | 3 | | 3,711 |
| Wildcats | 1 | | 958 |
| Total | 7 | | 14,691 |

### Keystone Pool Is Extended ¼ Mile West

The Keystone pool of Winkler County has been extended ¼ mile west by the Parker Drilling Co. 1 J. C. Ward. Bottomed at 3,289 ft., 1 Ward flowed 258 bbl. of 39-gravity oil in 24 hours, with oil-gas ratio of 1,000-1. The pay was topped at 3,090 ft. and was shot with 500 qt.

Location of the well is 440 ft. from the north and east lines of the south 280 acres of the west 400 acres of Section 24, Block B-3, P.S.L. Survey.

### SOUTHERN WEST TEXAS COMPLETIONS

(24-hr. ratings based on last 3 hr. of 6-hr. gage)

**Wildcats**

Upton County: Mesquite Oil 1 Neal, SW cor. Sec. 31, Certificate 414, C.&M. Sur., dry, T.D. 4,046 ft.

**Fields**

Abell, Pecos County: Magnolia 1 Silverman, 1,536 bbl., ½-in. choke, natural, 5,393-5,402 ft.
Sinclair Prairie 1 Heirman, 1,634 bbl., ½-in. choke, natural, 5,442-5,500 ft.
Apco, Pecos County: A. W. Thompson 1 Gregg, 1,469 bbl., ¾-in. choke, 5,000 gal. acid, 4,553-4,625 ft.
Foster, Ector County: Sinclair Prairie 4 Gist, 411 bbl., 200-qt. shot, 4,160-4,210 ft., P.B. from 4,295 ft.
Sinclair Prairie 5 Gist, 529 bbl., 200-qt. shot, 4,162-4,213 ft.

Halley, Winkler County: Skelly Oil 41 Halley, 448 bbl., 44/64-in. choke, 250-qt. shot, 2,752-2,878 ft.
Hayes Gas, Ward County: Bells-Wells Oil 1 Wilson, dry at 341 ft.
Roeser & Pendleton 1 Hayes, dry at 5,397 ft.
Hendricks, Winkler County: W. N. Hudson 1 Hendricks, 16½ bbl. oil plus 89 per cent water, 2,795-2,887 ft., P.B. from 2,890 ft.
Hoover, Crockett County: Rogers Harris 2 Hoover, 29 bbl., natural, 1,450-60 ft.
Hutchins, Ward County: Gulf Oil 158 Hutchins, 295 bbl., 475-qt. shot, 2,605-3,075 ft., T.D. 3,100 ft.
Sinclair Prairie 28 Archenhold, 388 bbl., 3,500 gal. acid, 2,838-3,000 ft.
Sinclair Prairie 29 Archenhold, 385 bbl., 3,500 gal. acid, 2,695-3,036 ft.
Johnson, Ector County: Atlantic 5-J Johnson, 521 bbl., ½-in. choke, 200-qt. shot, 4,127-80 ft.
George P. Livermore 2-27 Johnson, 491 bbl., 1¼-in. choke, 130-qt. shot, 4,107-59 ft.
Schermerhorn 14-B Johnson, 935 bbl., 687-qt. shot, 4,020-4,170 ft.
Jordan, Crane County: Atlantic 1-C-18 University, 22 bbl. oil and 16 bbl. water, 380-qt. shot, 3,200-3,310 ft.
Keystone, Winkler County: Gulf 42 Keystone, 163 bbl., 536-qt. shot, 3,340-3,479 ft., T.D. 3,489 ft.
S. W. Richardson 4 Keystone, 127 bbl., 1-in. choke, 330-qt. shot, 3,350-3,473 ft.
J. R. Sharp 3 Little-Jenkins, 182 bbl., ¾-in. choke. 240-qt. shot, 3,345-3,420 ft., T.D. 3,428 ft.
McElroy, Upton County: Gulf 249 McElroy, 177 bbl., 970-qt. shot, 2,925-3,165 ft.
McCamey, Upton County: T. P. Coal & Oil 44-A Lane 160 bbl., pumping, 2,000 gal. acid, 2,149-52 ft.
North Cowden, Ector County: Texas 8 Holt, 359 bbl., pumping, 485-qt. shot, 4,435-4,520 ft.
Trinity Drlg. Co. 4 Henderson, 648 bbl., 520-qt. shot, 4,100-4,304 ft.
Pecos Valley, Pecos County: Black & Richardson 1 Scharff & Blackmar, 9 bbl., pumping, 40-qt. shot, 1,660-75 ft., P.B. from 1,744 ft.
Samwan Oil 2 Boren, 39 bbl., 1,703-30 ft.
Tobarg, Pecos County: Stanolind 23-B Tippett, 40 bbl. oil and 27 bbl. water, pumping, 462-541 ft.
Waddell, Crane County: Gulf 43 Waddell, 5,400 bbl., 5,000 gal. acid, 3,310-3,516 ft.
White & Baker, Pecos County: Lewis & Engle 1-B White & Baker, 77 bbl., 130-qt. shot, 2,104-34 ft.
World, Crockett County Armer & Armer 13-A Powell. 146 bbl., 35 per cent water, 500 gal. acid, 2,673-75 ft.

### SOUTHERN WEST TEXAS ACTIVE WILDCATS

Brewster County: Chester Dewey 1 Decie, 660 ft. from N and 1,980 ft. from S lines Sec. 45, Blk. 4, G.C. &S.F. Sur., 3,000-ft. test, cementing crevice at 185 ft.
Crockett County: Bolsa Chico Oil 1 Bouscaren, 330 ft. from E and 624 ft. from S lines Sec. 57, Blk. GG, T.C. Sur., testing at 1,281 ft.
Amerada 1-C Todd, 660 ft. from W and S lines Sec. 15, Blk. 10, G.C.&S.F. Sur., 9¼-in. at 490 ft.
Culberson County: John Wolfe 1 Wilson-Briggs, 2,316 ft. from N and 1,500 ft. from E lines Sec. 1, Blk. 112, W. N. Olden Sur., Delaware sand test, first report.
Pecos County: Anderson-Prichard 1 Boren, 1,979 ft. from S and 660 ft. from E lines, Sec. 4, L. Merchant Sur., drilling 4,700 ft.
Gulf 1 Millar, Sec. 29, Blk. 11, H.&G.N. Sur., drilling 1,190 ft.
Cremin & Boren 1 Bowen, 2,310 ft. from NW and 1,650 ft. from NE lines Sec. 60, Blk. 10, H.&G.N. Sur., 2,100-ft. test, running 8¼-in. casing to 839 ft.
Ward County: J. E. Fitzpatrick 1 T. B. Pruitt, SW SW Sec. 23, Blk. 1, W.&N.W. Sur., fishing tools at 1,510 ft.
Shell Oil 1 Sealy-Smith, 2,310 ft. from S and 330 ft. from E lines Sec. 38, Blk. A, G.M.M.B.&A. Sur., Ordovician test, 16½-in. 90 ft., drilling ahead.
Winkler County: Magnolia 20 States-Walton, NW cor. Sec. 4, Blk. 3-B, P.S.L. Sur., based Permian 7,630 ft., drilling 7,694 ft.

## Northern Area Quiet Except For Lubbock County Show

After a week of inactivity, definite information in this district reported a Lubbock County wildcat showing for oil, a new wildcat location and a ¼-mile extension for the Emma pool. At the first of the week, considerable excitement was caused by the Mascho Oil Co. 1 Fisher in Andrews County which appeared to be opening a new pool. However, at the end of the week operators had shut down for orders after swabbing 3 bbl. of sulfur water an hour with a slight show of oil and gas.

In Lubbock County, the L. C. Harrison 1 W. G. Nairn estate, Section 25, Block A, John Gibson Survey, 3½ miles northeast of the city of Lubbock, reported coring from 4,881 to 4,891 ft. with 10 ft. of saturated lime with slight porosity. Top of the pay was given as 4,865 ft. and the lime section is thought to be in the Clear Fork of lower Permian age. Definite identification of the saturation section must await closer examination. Work was halted at 4,700 ft. to set 7-in. casing. After casing has been set, the test will be standardized and drilling continued.

### Emma Pool Is Extended ¼ Mile North

The Emma pool in southern Andrews County has been given a small ¼-mile north extension by Cities Service 1-D University. The test was bottomed at 4,500 ft. and during the first half of a 12-hour gage pumped only water. However, the last 6 hours of the gage the well pumped 110 bbl. of oil and 69 bbl. of water. Pay was topped at 4,323 ft. and was treated with 4,000 gal. of acid. Location is 330 ft. out of the southwest corner of the NW¼ of Section 31, Block 9, University Lands Survey.

### Wildcat Staked in Southwestern Andrews County

Southwestern Andrews County is in line for an additional wildcatting operation as Fuhrman Oil staked location for 1 William Seidel, 3 miles west and slightly south of the Fuhrman pool. Location of 1 Seidel is 467 ft. from the south and east lines of Section 6, Block A-42, P.S.L. Survey. This places it 1 mile north of a 4,207-ft. failure drilled by Maer & Meadors at 1 Taylor. Contract depth is 4,700 ft.

### NORTHERN WEST TEXAS COMPLETIONS

(24-hr. rating based on last 3 hr. of 6-hr. gage)

#### Wildcats

Terry County: Anderson-Prichard and Osage Drlg. Co. 1 Christman, SW cor. Sec. 49, Blk. T, D.&W. Sur., dry at 5,520 ft.

#### Fields

Andrews, Andrews County: Cities Service 1-D University, 110 bbl., 69 per cent water, 4,000 gal. acid, 4,323-4,500 ft.
Dockery-Robbins, Mitchell County: E. R. Lloyd 2 Fuller, 86 bbl. oil plus 21 per cent water, 565-qt. shot, 1,609-1,723 ft.
North Cowden, Andrews County: Atlantic & Sun 5-C Holt, 482 bbl., 245-qt. shot, 4,393-4,496 ft.
Sharon, Scurry County: B. R. & S. Oil 2-A Chapman, 140 bbl., 660-qt. shot, 1,670-1,752 ft.
R. & Y. Oil 1 Burney, 126 bbl., 840-qt. shot, 2,268-2,482 ft.
Seminole, Gaines County: Magnolia and Atlantic 2-189 H. & J., 72 bbl., 33 per cent water, 2,000 gal. acid, 5,240-85 ft.
Slaughter, Cochran County: Atlantic Refg. 17 Boyd 133 bbl., 2-in. casing outlet, 10,000 gal. acid, 4,970-5,060 ft.
Honolulu 7-4 Igoe Smith, 790 bbl., 2-in. casing outlet, 9,000 gal. acid, 4,930-5,000 ft.
Honolulu 6-A Mallett, 785 bbl., 2-in. casing outlet, 9,000 gal. acid, 5,058-79 ft.
Mid-Continent 5-A Mallett, 699 bbl., 3-in. casing outlet, 11,000 gal. acid, 5,012-65 ft.
Slaughter, Hockley County: Fain & Riner 1 Slaughter, 707 bbl., 2-in. casing outlet, 10,000 gal. acid, 4,917-99 ft.

*(Continued on Page 80)*

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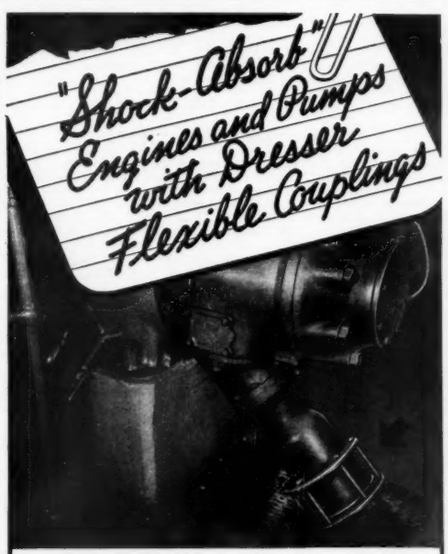


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# South-End Well at Cut Bank Flows 1,000-Bbl. a Day

By T. R. INGRAM

DENVER, Colo., Aug. 4.—The south end of the Cut Bank field in Montana took the spotlight this week with a 1,000-bbl. well in R. C. Jeffries 1 Tribal-201, NE SE NE 30-32n-5w, the largest well ever completed in the Cut Bank sand in that field and exceeded only by Santa Rita 1 Lander, producing from the Sunburst sand. The Santa Rita well is 20 miles to the north and 4½ miles west of the Jeffries well. The latter had the Cut Bank sand at 2,785-2,852 ft., with the main pay in the lower Cut Bank at 2,835-52 ft. When tools were pulled it began flowing and was estimated at 1,000 bbl. It made 1,100 bbl. second period and then flowed at the rate of 35 bbl. an hour. This is the first well drilled in Section 30, but does not mark an extension. It is in the district opened a few month ago by the sale of Blackfeet Indian leases.

## SUMMARY OF COMPLETIONS

*Wyoming*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 2 | 539 | 7,630 |
| Dry holes: Wildcats | 1 | .... ... | 2,540 |
| Total | 3 | ..... | 10,170 |

*Montana*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 4 | 1,308 | 10,143 |
| Dry holes: Fields | 2 | ..... | 3,357 |
| Wildcats | 1 | ..... | 5,705 |
| Total | 7 | ..... | 19,205 |

It is ¼ mile south of nearest well in Section 19 where drilling has been most active this year, nine wells having been completed since January 1 with an average per well of 192 bbl. It is a mile northeast of Pioneer Lumber 1 Anderson, completed last month for 165 bbl. first 12 hr. Elevation of Jeffries well is 3,580 ft.

The California Co. abandoned its deep test in the Mosby area of the Cat Creek district at 5,705 ft. It was drilled to the top of the Madison lime at 3,545 ft. last year by H. H. Schwarts, Jr., and was taken over recently by the California Co. to deepen to the Devonian.

### New Well Extends Limits of Wertz Dome, Wyoming

The Wertz field in Carbon County, Wyoming, was extended one location to the east in Sinclair-Wyoming 20 Wertz, NE SW NE 7-26n-89w, which flowed 515 bbl. in 24 hours from the Tensleep at 6,215 ft., total depth. It is an east offset to 14 Unit which was completed a year ago at 6,043 ft. and flowed at the rate of 201 bbl. an hour through the 2-in. tubing. No. 20 Wertz had the top of the Tensleep at 5,860 ft. and drilled in under heavy pressure. No open flow test through the tubing was reported.

Prospects for a discovery on Canyon Creek continue to improve as West States Petroleum 1 Unit continues drilling. Gas sand at 2,715-35 ft. showed for 5,000,000 cu. ft. on drill-stem test. A third sand was reported picked up at around 3,250 ft. which showed considerable gas with 20 ft. of oil saturation. It will continue to around 4,200 ft.

The British American Oil Co. and Superior Oil Co. of California are reported preparing to drill a deep test in Pilot Butte this summer. Tentative location is in SW 22-3n-1w, less than ½ mile from 1 Dykeman completed in 1930 by the Kinney-Coastal Oil Co. at 3,365 ft. from 81,000,000 cu. ft. of gas. This well is shut in.

### Northwestern Colorado Oil Moving At Rate of 1,200 Bbl. a Day

Mountain Fuel Supply Co. is reported moving around 1,000 bbl. of oil a day from the Florence Wilson lease in the East Hiawatha field in northwestern Colorado, along with 200 bbl. a day from the Powder Wash field 20 miles to the east. The oil is trucked to the Union Pacific railroad in Wyoming and transported by tank cars to destination. Hiawatha for many years was exclusively a gas field. Mountain Fuel has decided not to deepen 1 Lasher, on West Hiawatha, but has plugged the hole and will drill from the surface in 2 Lasher. Objectives are the sands which produce oil on East Hiawatha. West Hiawatha has produced only gas. No. 1 Lasher was completed in 1929 at 2,160 ft. for 5,310,000 cu. ft., 940 lb. pressure.

### COLORADO DRILLING REPORT

El Paso County: F. F. Hintze 1 State, CEL SE SE 16-11s-60w, S.D. 1,990 ft.
La Plata County: N. Spatter 1-X Bruce, C SW SW 31-33n-9w, T.D. 4,450 ft., cleaning out after cementing caves.
E. B. Klem 1 Olbert, NW SW 9-35n-12w, drilling 4,213 ft.
Logan County: Mutual Oil 1 State, C SW SW 32-7n-51w, moving in rotary.
Moffat County: Mountain Fuel Supply 9 Wilson, NE SE NE 22-12n-100w, rigging rotary to go to 2,500 ft.
Privett & Spangler 1 Stillings, NE SE SE 12-5n-96w, drilling 650 ft. in gray shale.
Mountain Fuel Supply 2 Lasher, NW NE NE 25-12n-101w, rigging up to test sands on West Hiawatha which produce oil in East Hiawatha, takes place of 1 Lasher, which was intended for deep test.
Mountain Fuel Supply 4 Musser, NE NW NW 4-11n-97w, drilling 1,900 ft., first report, Powder Wash, outside well on east side between 2-A Musser, a gasser, and 1 Allen, an oil well.
Rio Blanco County: Texas-California 6 Unit, NW NE SE 27-3n-94w, T.D. 6,487 ft., P.B. and testing Morrison sand at 6,280-97 ft., flowing around 200 bbl. per day.
Buford Oil 1 Government, C SW SW 16-1n-91w, drilling 4,527 ft., anhydrite and dolomite.
Texas-California 7 Unit, NE SW SE 34-3n-9w, cmtd. 13⅜-in. at 700 ft.
United Oil Prod. 1 Hill, Lot 13, 6-1n-101w, spudded.

### WYOMING COMPLETIONS

Indian Hills, Laramie County: Indian Hills Oil 1 Harding, C NW NW 17-14n-65w, T.D. 2,540 ft., in Pierre shale, plugged and abandoned.
Wertz, Carbon County: Sinclair-Wyoming 20 Wertz, NE SW NE 7-26n-89w, T.D. 6,215 ft., flowed 515 bbl. first 24 hr. from Tensleep, 7-in. cemented on top at 5,856 ft.
Osage, Weston County: Wyoming Oil & Gas No. 17, CSL SE SW 19-46-63, sand at 1,376-86 ft., pumped 24 bbl. in 24 hr. after shot.

### WYOMING DRILLING REPORT

Big Horn County: Ohio 2-A Hoskins, SE SE SE 15-56n-97w, T.D. 5,360 ft., cemented 7-in. on top Tensleep at 5,230 ft., testing on pump.
Carbon County: Sinclair-Wyoming 5-C Mahoney, C NW SE 34-26n-88w, T.D. 4,566 ft., P.B. to 4,413 ft., redrilled to 4,491 ft., shot with 310 qt. at 4,325-4,410 ft., testing.
Sinclair-Wyoming 22-A Wertz, CEL SE SE 1-26n-90w, drilling 5,990 ft., cmtd. 7-in. on top Tensleep at 5,856 ft.
Sinclair-Wyoming 23-A Wertz, NE NE NE 12-26n-90w, cmtd. 7-in. on top Tensleep at 5,969 ft.
Glen Swartout 3 Union Pacific, NE NE SE 21-22n-78w, drilling 100 ft.
Ohio 3 H. & C., C SW SE 27-20n-78w, T.D. 3,717 ft., P.B. to 3,702 ft., testing.
Ohio 4 Harrison & Cooper, NW SE 27-20n-78w, drilling 275 ft., first report, Rock River field.
Fremont County: Indian Oil 3 Tribal, NW SW NW 23-6n-2w, drilling 693 ft.
Valentine M. Kirk 3 Tribal, NW NW SW 23-6n-2w, drilling 1,082 ft.
Sinclair-Wyoming 3-A Unit, NW NW NE 3-33n-92w T.D. 5,484 ft. in Lakota sand, cemented 7-in. at 5,462 ft., perforated with 51 holes at 4,130-4,155 ft., testing.
Bison Bason Oil 1 Kirk, CEL NW SW 17-27-95w, drilling 1,600 ft.
Laramie County: Indian Hills Oil (Garetson & Knisely) 1 Kirkbride, C NE NW 14-18n-66w, S.D. 1,200 ft., first report, Horse Creek district, 2½ miles west 1 Harding, abandoned at 2,540 ft.
Natrona County: General Pet. 37-21-G, NW SE SW 21-35n-77w, drilling 4,015 ft.
General Petroleum 55-22 Government, NW SE 22-35n-77w, location.
Casper Creek Oil 1 State, SW SW NW 36-36n-81w, T.D. 2,612 ft., preparing to run 6¼-in.
Iba Development 1, C NE SE 25-32n-82w, running 5½-in. at 1,510 ft.
Niobrara County: Ohio 10 A. Rohlff, SW NE 32-36n-65w, drilling 4,489 ft.
Ohio 19 Lamb, CSL NW NE 5-35n-65w, drilling 5,204 ft.
Argo 17-B Elliott, SW NE NE 6-35n-65w, T.D. 5,386 ft., P.B. to 5,260 ft., water in third Leo.
Western Petroleum 1 Mosier, SW SW 31-35n-64w, drilling 760 ft.
Continental 9-A Schuricht, NW NW SW 5-35n-65w, derrick, waiting on equipment.
Continental 8-A Dielman, NW NW NW 8-35n-65w, drilling 5,305 ft.
Continental 14 O. Rohlff, NW NW SW 32-36n-65w, drilling 1,590 ft.
Lewis Gokel 2, CEL SW SE 2-34n-63w, spudded.
Park County: Stanolind 21-X Rosenberg, NE SW NW 25-58n-98w, T.D. 3,037 ft., installing pump.
Enalpac O. & G. 1 Purple-O.P.C., SE SE 31-51n-100w, drilling 3,589 ft.
Husky Refining 2 Morris, SW NE 29-51n-100w, T.D. 3,520 ft. in Tensleep, testing.
Standard 11-X Rosenberg, SE NE NE 26-58n-98w, drilling 400 ft.
MacKinney Oil & Drilling 1 Northern Pacific, CNL NW NW 5-57n-99w, drilling 1,505 ft.
Sublette County: Texas 1-A Government, NW NW NW 34-27n-113w, drilling 487 ft.
North La Barge Oil 9 Government, CSL NE NE 28-27n-113w, T.D. 1,286 ft., P.B. to test first sand.
Marvel Oil 2 Govt., C NE SE 28-27n-113w, rigging, first report.
Sweetwater County: Rocky Mountain Drilling 1 State, SW SW SW 36-20n-104w, S.D. 6,447 ft.
West States Pet. 1 Unit, C SE SE 10-12n-101w, drilling 3,410 ft., 5,000,000 cu. ft. gas in sand at 2,715-35 ft.
Gus Pongratz 1 Clark, C NW NE 22-14n-104w, drilling 6,109 ft., top Embar 5,840 ft.
Sinclair-Wyoming 101-A, NW NW NW 11-26n-90w, drilling 3,885 ft.
Mountain Fuel Supply 2 Newberger, SW NW NW 18-12n-99w, T.D. 3,845 ft., P.B. to 3,285 ft. to test upper sands, will make a gas well.
Sinclair-Wyoming 102 Lost Soldier, SE SE SE 3-26n-90w, derrick.
Vermillion Oil 1 Government, SW NE NE 6-12n-99w, drilling 1,250 ft.
Weston County: W. H. Connor 2 State, NE SW 36-42n-62w, drilling 682 ft., through Lakota.
F. J. Dilger No. 17, C NW SW 30-46n-63w, drilling below 1,450 ft.
John Brorphy 1 Hansen, NW NE NW 13-44n-63w, T.D. 2,820 ft., fishing.
Pierre LaFleishe 1 Dober, NW NW NE 21-45n-63w, drilling below 3,400 ft., preparing to core.
Carl Kundy No. 3, NE NE NW 32-46n-63w, location.
George Keisling 2 Guyer, SW SW SE 26-46n-64w, sand at 1,916-53 ft., will make av. well.
Bert Higgins 8 fee, NE NW SW 4-46n-63w, drilling 60 ft., first report.
Wyoming Oil & Gas No. 18, CEL SE SW 19-46n-63w, spudded, first report, Osage field.

### MONTANA COMPLETIONS

Cut Bank, Glacier County: R. C. Jeffries 1 Tribal-201, NE SE NE 30-32n-5w, T.D. 2,855 ft., 7-in. at 2,810 ft., no Sunburst sand, Cut Bank sand at 2,785-2,852 ft., main pay, 2,835-52 ft., flowed 1,000 bbl. first 24 hr.
Texas 1-B Government, C NW SW 8-32n-5w, T.D. 2,941 ft., 7-in. at 2,880 ft., Cut bank at 2,875-2,939 ft., main pay 2,933-39 ft., swabbed 150 bbl. first 24 hr.
Consolidated Gas 1 Frary-Tribal-206, NE NE SW 19-32n-5w, T.D. 2,834 ft., swabbed 150 bbl. first 24 hr. from Cut Bank at 2,795-2,833 ft., main pay at 2,823-33 ft.
Mosby Dome, Garfield County: California Co. 4 Charles, C SE NW 21-15n-30e, T.D. 5,705 ft., P. & A., top of Madison around 3,545 ft.
Kevin-Sunburst, Toole County: Huso Brothers 2 Ellingson, C SE SE 14-35n-3w, T.D. 1,806 ft., contact 1,744-46 ft., P. & A.
Ramona Oil 5 Government, CSL NE NW 12-35n-3w, Sunburst at 1,521-51 ft., dry, P. & A.
Silver Oils, Ltd. 4 Haskins, SE NE NE 25-36n-2w, pumped 8 bbl. a day from the Sunburst at 1,540-79 ft.

### MONTANA DRILLING REPORT

Big Horn County: Midland Empire Oil 1 Sunray, NW NW SE 34-6s-32e, T.D. 110 ft., rigging heavier equipment.
Carbon County: Continental 1 Merrill, SW SW SW 34-9s-25e, building rig.
Fallon County: Carter 1 Northern Pacific unit, C SE SW 19-4n-62e, drilling 6,559 ft. (cor.)
Garfield County: California Co. 4 Charles, C SE NW 21-15n-30e, drilling 5,700 ft.
Glacier County: Par Oil 1 Tribal-200, NE NE SE 13-32n-6w, T.D. 705 ft., fishing.
Texas 7 Curren, C SE NW 8-32n-5w, location.
Texas 2 Lander, C NE SE 20-35n-6w, spudded.
Texas 2-B Government, SE SE SE 18-32n-5w, moving in.
Glacier Production 5 Fuller, CEL NE 17-35n-5w, spudded.
Glacier Production 8 Miller, CEL SE NE 32-33n-5w, drilling 625 ft., top Colorado 585 ft., 10¾-in. 612 ft.
W. F. Saunders, trustee, 1 Tribal-199, NE SE SE 24-32n-6w, spudded.
A. R. Pardue 3 Tribal-186, SW NW NW 20-32n-5w, rigging up.
A. B. Cobb-Texas 1 Mueller, NW NW SW 2-35n-6w, cmtd. 10¾-in. 642 ft., top Colorado 640 ft.
Texas 3 Lindquist, C NE NE 20-32n-5w, moving in, first report.
McDonald, Henderson, Overcash 2 Tribal-190, SW NW NW 29-32n-5w, building rig, first report.
Texas 3 Willis, SE NW NE 19-32n-5w, rig, first report.
Ralph N. Davis 1 Tribal-205, NE SE NE 25-32n-6w, spudded, first report.
Hill County: A. B. Cobb 1 Government, SE SE NE 19-27n-15e, T.D. 4,148 ft. (cor.), first squeeze job did not hold, used 300 sacks on second job.
Edwards & Callison 1 Hansen, SW SE NW 25-33n-15e, drilling 1,300 ft.
Liberty County: Montana-Dakota Utilities 1 Oswood, C NE SW 18-35n-4e, drilling 2,689 ft. in Kootenai.
Toole County: Lund & Engleking 1 State, NE NE NE 34-35n-4w, T.D. 2,066 ft., break at 2,058-60 ft., acidized 500 gal., no results, will acidize again.
Dakota-Montana Oil 20-A Government, NE SW SW 31-35n-1w, drilling 1,360 ft.
J. H. Agen 17 Goeddertz, SE SE NW 23-35n-3w, T.D. 1,702 ft., contact 1,694-1,702 ft., 100 ft. oil in hole, acid, 500 gal., testing.
Bosworth & Shubat 1 Lukenbill, C SW NE 11-36n-2w, T.D. 1,926 ft., contact 1,919-23 ft., 1,700 ft. water, will shut off with 5½-in. and drill deeper.

*(Continued on next page)*

## SOUTHWEST TEXAS

# Duval County Distillate Field Is One of Several Strikes

By F. L. SINGLETON

CORPUS CHRISTI, Tex., Aug. 4.—Developments in the Southwest Texas and Lower Gulf Coast districts the past week gave promise of uncovering several additional new fields for the area. Important extensions were reported in several fields, and in others new sands were opened. Increasing activity was reflected in drilling throughout the district.

Argo Oil Corp. 1 Nelson Gonsales, a wildcat in the Dionicio Elizondo grant, 3 miles north of Santa Cruz, Duval County, has been completed through the drill stem making an estimated 4,000,000 cu. ft. of gas daily, with a spray of amber colored distillate, believed to be coming from perforations in the drill stem at 6,260-80 ft. No accurate gauges have been taken, but rock pressure is 2,800 lb. and flowing pressure 2,625 lb. Gravity of the distillate is 53° A.P.I.

### SUMMARY OF COMPLETIONS

*Lower Gulf Coast District*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 10 | 1,005.46 | 62,184 |
| Dry holes: Fields | 2 | ..... | 8,706 |
| Wildcats | 2 | ..... | 10,097 |
| Total | 14 | ..... | 80,987 |

*Laredo District*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 8 | 758.27 | 25,071 |
| Gas wells: Fields | 2 | ..... | 4,138 |
| Wildcats | 1 | *96.36 | 3,023 |
| Total | 11 | ..... | 32,232 |

*South Central Texas District*

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 2 | 269 | 2,658 |
| Dry holes: Fields | 2 | ..... | 4,245 |
| Wildcats | 2 | ..... | 1,377 |
| Total | 6 | ..... | 8,280 |

*Million cu. ft.

This apparently opens a new field although the well as yet has not been completed. The production is through 4-in. drill pipe, on which are ¼-in. and ⅛-in. chokes. The well had been drilled to 6,308 ft., finding sand showing gas-distillate, but losing bit in the hole. Unable to mill out the bit at 6,295 ft. operators plugged back to 6,294 ft., cementing the drill pipe. After perforating the drill pipe at 6,260-90 ft., the approximate level of the sand, and acidizing, the well came in and was allowed to flow for 12 hours on test.

**New Edwards Lime Field Indicated Along Balcones Fault**

Interest also is directed to Wilson County, along the Balcones Fault line, where a wildcat drilled by Shell Oil Co., Inc., is reported to have tried to blow out for another possible new Edwards Lime field. This well, 1 J. J. Ridout, J. W. Brown Sur., is approximately 7 miles northeast of Floresville, 30 miles southeast of San Antonio. Bottom of the hole is around 5,400 ft. in the Edwards Lime, reported encountered at approximately 5,175 ft. The well was killed but has drill pipe stuck.

The hole was drilled to a contract depth of approximately 5,300 ft. by Trio Oil Co. of Seguin, and then taken over by present operators. Due to the fact that the well has been drilled "tight," definite details are not available.

**Deep Gas Zone Opened in Washburn Field**

In the Washburn field, near Cotulla, LaSalle County, H. R. Cullen of Houston is attempting to complete 3 J. L. Washburn as a gas well in a new, deep horizon. The well was drilled to a total depth of 11,042 ft. in what is reported as the Edwards Lime. In a drill stem test with setting around 9,900 ft., the well started cleaning, showing gas, wash water and mud. Operators at latest report were pumping mud to kill the gas, and attempt completion. This is another well about which operators have revealed very little specific information, but it is believed the gas came from a horizon around 7,600 ft., which has been variously reported as being in the Austin Chalk or the Georgetown Lime. Operators state they will use the gas from this well in a drilling program which will call for one well monthly to the Wilcox, from which formation the field already has been proved productive. This well is approximately 3,104 ft. northwest of the discovery well, No. 1 Washburn, completed originally in the Wilcox around 5,400 ft., and later recompleted in a 4,800-ft. sand.

**New Production Found In Three Areas**

Simmons Oil Co. has extended the Oakville Field, Live Oak County, 1½ miles southwest in the completion of 2 Reagan flowing 40 bbl. of oil and 200,000 cu. ft. of gas daily through a ¼-in. choke with casing perforated at 2,743-48 ft.

In the Minnie Bock Field, Nueces County, a new deeper sand has been established by the completion of Wellington Oil Co. 2 Howze, which came in making considerable gas and distillate through a 7/32-in. choke with casing perforated at 5,510-18 ft. The well is an offset to a 3,800-ft. sand producer.

A new sand was opened and production extended a quarter mile north at East Premont, Jim Wells County, with the completion by Magnolia Petroleum Co. of its No. 17 Seeligson flowing 5 bbl. hourly through a 5/32-in. choke with casing perfortions at 5,555-58 ft. Total depth of hole is 6,845 ft. with 7-in. casing at that level.

**Lentz Field Discovery Flows 248 Bbl. a Day**

W. J. Furlong and C. L. Thompson 1 C. L. Lentz, the discovery well of the new Lentz field, Bastrop County, continues to flow at the rate of 248 bbl. daily through a ⅝-in. choke. The discovery is located about 3,000 ft. southwest of the Carrol field but production is separated by several dry holes. Material is being moved in by same operators for 2 Lentz, 940 ft. northeast.

### SOUTHWEST TEXAS COMPLETIONS

#### LOWER GULF COAST DISTRICT

**Wildcats**

Karnes County: Ralph E. Fair, Inc., 1 John Hancock Mutual Life, dry, T. D. 2,810 ft.
Nueces County: Premont Pet. et al 1 Ross, dry, T. D. 7,287 ft.

**Fields**

East Flour Bluff, Nueces County: Humble 1 Haas & Curry, 66 bbl. 17 hrs. 3/32-in. choke, T. D. 6,804 ft.
East Placedo, Victoria County: Stanolind 12 Vandenberg & Hill, 18 bbl. net dist., 10/64-in. choke, perf. casing 6,367-60 ft., T. D. 6,910 ft.
East Premont, Jim Wells County: Sun 1 Canales, Prajedis, 173.46 bbl., ¼-in. choke, T. D. 5,210 ft.
Midway, San Patricio County: Phillips Pet. 5, Schmidt, 120 bbl. oil & 326 bbl. salt water, 5/32-in. choke, perf. casing 5,310-14 ft., T. D. 5,395 ft.
Minnie Bock, Nueces County: Graham Oil Co. 2 Tom Rutland, 65 bbl., perf. casing 3,712-14 ft., T. D. 3,824 ft.
Odem, San Patricio County: Wellington of Del. 1-C, Welder, 145 bbl. ¼-in. choke, T. D. 7,220 ft.
Plymouth, San Patricio County: Plymouth 118 Welder, 130 bbl. 7/64-in. choke, perf. casing 6,136-47 ft. T. D. 6,147 ft.
Saxet, Nueces County: Southern Minerals 8 Bliss, Est. 850,000 cu. ft. gas & 60 bbl. dist. per day, ⅛-in. choke, perf. casing 7,212-22 ft., T. D. 7,238 ft.
Stratton, Nueces County: Chicago Corporation 15 Wardner, 142 bbl. ¼-in. choke, T. D. 6,615 ft.
Turkey Creek, Nueces County: Renwar Oil 22 McKenzie, dry, T. D. 5,637 ft.
Victoria, Victoria County: Bailey, C. H. 2 Jewitt, dry, T. D. 3,069 ft.
Woodsboro, Refugio County: Sinclair, 1 Boenig, 60 bbl. ⅛-in. choke, T. D. 6,821 ft.

#### LAREDO DISTRICT

**Wildcats**

McMullen County: Argo Oil 1 Edrington Est. "1" Farm, 48.18 bbl. in 12 hrs., ⅝-in. choke, T. D. 3,023 ft.

**Fields**

Boyle, Starr County: Fidelity O. & R.-2-D Carruth, 57 bbl. ⅛-in. choke, perf. casing 3493-98 ft., T. D. 3,514 ft.
Casa Blanca, Duval County: Texas Co. 46 D.C.R.C. Sur. 88, pumping 19 bbl. net oil, perf. casing 1027-30 ft., T. D. 1,034 ft.
Colorado, Jim Hoff County: Humble 23-B King Ranch-Colorado, 117 bbl. 3/16-in. choke, T. D. 3,037 ft.
Killam, Webb County: Killam 16 Garcia, 45 bbl. 3/16-in. choke, perf. casing 2,024-26 ft. T. D. 2,065 ft.
Lopena, Zapata County: American-Texas Oil 1 Ramirez, Y & R, 25,000,000 cu. ft., perf. casing 2,465-80 ft., T. D. 2,552 ft.
Lundell, Duval County: Government Wells 52 Lendell, 11,500,000 cu. ft. dry gas, T. D. 1,586 ft.
Piedra De Lumbre, Duval County: Magnolia 26 D.C.R.C. Sur. 203, pumping 100 bbl., perf. casing 2,129-31 ft., T. D. 2,133 ft.
Rincon, Starr County: Continental & Davis, W. R. 58-B Slick Est., 194.27 bbl., 3/16-in. choke, perf. casing 3,912-28 ft., T. D. 4,284 ft.
Sam Fordyce, Starr County: Porter, et al, 2 Saenz, 35 bbl. 3/16-in. choke, perf. casing 4,102-15 ft., T. D. 4,145 ft.
Sun, Starr County: Sun 10-A Montalvo, 191 bbl. 5/32-in. choke, perf. casing 4,844-4,859 ft., T. D. 4,859 ft.

#### SOUTH CENTRAL TEXAS

**Wildcats**

Bexar County: Lewis 1 Schroeder, dry, T. D. 1,152 ft.
Menard County: Sorrels, et al, 1 Wilkerson, T. D. 225 ft. dry.

**Fields**

Bee Creek, Caldwell County: Ogden, Ralph R. 13 Talley, 268 bbl. T. D. 2,226 ft.
Byersville, Williamson County: Clark, et al, 1 Freels, dry, T. D. 1212 ft.
Carrizo, Dimmit County: Producers Corp. of Nevada, 2 McKnight & Bennett, dry, T. D. 3,033 ft.
Gas Ridge, Bexar County: Bussa, H. J. 20-B Barker, 1 bbl. on pump, T. D. 432 ft.

#### SOUTHWEST TEXAS DRILLING REPORT

Atascosa County: Lester Foran, trustee, 1 Bowen, Wm. Moore Sur. No. 895, 1 mi. W of Pleasanton townsite, moving in rig.
Bastrop County: Wiegand Bros. 1 O. B. Lentz, Jacob G. Lentz Sur. ½-mi. SW of Lentz field, spudded.
Bee County: Hewitt & Dougherty 1 Ray, J. Poitevant Sur. Lot 17, 5 mi. E. Beeville, coring shale 3,770 ft.
Heyser, Heard & Clardy, 1 Claude Heard, M. M. & J. Tool Sur., 10 mi. SE Beeville, T.D. 5,309 ft., cemented casing, W.O.C.
Duval County: H. H. Howell 1 Parr, G.H.&H. RR. Sur. 1 mi. E Thomas Lockhart field (6 mi. NW San Diego), drilling sand and shale 4,705 ft.
Frank Gravis 1 Loving, S&M Sur. No. 51, 7 mi. SW of San Diego, spudded for 5,700 ft.
J. B. Blanchard 1 Carrillo heirs, A. Cantu Sur., 10 mi. W of San Diego, rigging up for 4,700 ft. Pettus sand test.
Manley & Campbell 1 Neely, Sur. No. 284, 1 mi. SW of Charamousca field, spudded.
Frio County: Seaboard 2 Halff & Oppenheimer, Pearsall field, rigging up for deep test.
Jim Hogg County: Plymouth 2 Sweeney, Las Animas Grant, 10 mi. NW Kelsey field, rigging up.
Navarro 2 Trevino, Teresa Grant, extension test Kelsey field, rigging up.
Live Oak County: E. M. Jones 3-B George West, Nelson Owen Sur. 4½ mi. SW of George West, T.D. 9,733 ft., reperforated 9,137-61 ft., tested salt water, squeezed perforations, W.O.C.
Nueces County: Forest Dev. Co. Development 1 J. F. Koemel, M. L. de Herrera Grant, 2 mi. N of Robstown, drilling shale 5,451 ft.
Refugio County: Roland S Bond 1 Bartholemew, Juan Pobedano Sur., Sec. 31, 3 mi. NW Bayside, rigging up for 7,000-ft. test.
Webb County: H. E. Murray 1 Grant Adami, Sur. No. 338, 1¼ mi. SW Adam field, spudded.
Wilson County: Shell 1 Rideout, J. W. Brown Sur. 7 mi. NE of Floresville, drill stem stuck 5,400 ft., fishing.
Zavala County: Humble 1 Rose Wolf, P. J. de Aguirre Sur., Sec. 12, drilling lime and shale 4,894 ft.

## Rocky Mountain Area

*(Continued from Preceding Page)*

M. F. Toles 12 Norum, SW SE SW 33-35n-2w, T.D. 1,475 ft., acid. 1,000 gal., testing.
R. G. Parrant 1 McAlpine, SW NW SE 25-37n-3w, drilling 60 ft.
Nepstad Oil 2 Hugi, NE SE NW 11-35n-3w, T.D. 1,844 ft., no results, standing.
Imperial-Craig 5 Martin, C SW SW 18-35n-1w, T.D. 1,558 ft., cmtd. 7-in. at 1,558 ft.
Enfield Oil 4 Zachor, SE NW NW 20-35n-1w, T.D. 1,525 ft., running 7-in.
Adlon Oil & Mines 3-X Ward, SW SW SE 29-35n-3w, drilling 850 ft.
R. G. Parrant 1 Bannister, SW SE SW 35-37n-3w, spudded to 40 ft. and S.D.
Casper T. Oien 3 Government, NW SW NE 14-35n-2w, drilling 285 ft., first report.
Montana-Dakota Utilities 321 Schmidt, C SE SE 20-35n-1w, drilling 600 ft., first report.
Big West Oil 8 Ellingson, C SE SW 14-35n-3w, drilling 830 ft., first report.

#### NORTHWEST NEW MEXICO DRILLING REPORT

San Juan County: Al Greer 2 Thompson, SW SE SW 10-30n-11w, drilling 2,000 ft., show gas.
Carroll & Cornell 3 Cornell-Government, C NW SW 12-29n-12w, moving in, first report, Fulcher basin.
Southern Union Production 2 Reid-Government, NE SE NE 13-29n-12w, spudded, first report, Fulcher basin.
Torrance County: Cardinal Oil 1 State, SE SW 3-8n-14e, T.D. 660 ft., running 8¼-in., red beds at 510-625 ft.

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# Among the Drilling

DECISION of one of the first cases in which an oil-well drilling contractor was sued for violation of the wages and hours law went against the contractor when the U. S. District Court for the Northern District of Texas ruled that rotary drilling crews were engaged in the production of goods for interstate commerce and were therefore subject to the act. The suit was brought by O. V. Hall and others against the Warren-Bradshaw Drilling Co., Tulsa. Judge James C. Wilson held that the work done by the rotary crew was an essential part of the operation, but the defendant being a contractor did not affect the status of the men as far as the law was concerned, that failure to complete the well had no bearing on the case and finally that the oil and gas produced did actually move in interstate commerce.

ROWAN Drilling Co., Fort Worth, Tex., is in process of completing Amerada Petroleum Corp. 1 RA University, Ordovician field discovery well in Reagan County, 7½ miles southeast of Big Lake. The well was drilled to 9,080 ft. On production test through 2-in. tubing and 13/64-in. choke the well flowed 70.5 bbl. of oil in 3¼ hours. A drilling campaign in the area is likely to develop since only the 160-acre lease on which the discovery well is located is perpetuated by the producer. Other leases of similar size in the area carry an expiration date of June 24, 1943.

OSAGE Drilling Co., Oklahoma City, Okla., has abandoned the wildcat test in Terry County, Texas, it was drilling in conjunction with Anderson-Prichard. The test well, 1 Christman, 3 miles southeast of Brownfield, Tex., was drilled to 5,520 ft.

VAUGHN Drilling Co., Dallas, Tex., headed by Grady Vaughn, has assigned one of its rotary rigs to southwestern Shelby County, Texas, southwest of Center, Tex., where the company will soon start the first of two wildcat tests on Frost Lumber Co. acreage. Location for the first test has been made near the center of the Tyre Buckley Survey. Both operations are contracted to 4,000 ft.

OSAGE Drilling Co., Inc., Oklahoma City, Okla., has received contract to drill Fuhrman Petroleum Corp.'s wildcat test 3½ miles northwest of the Fuhrman pool in southern Andrews County, Texas. Contract specifies drilling to 4,700 ft. unless oil production or sulfur water is encountered at a lesser depth. Osage also announces completion of its contract of drilling a joint wildcat test with Anderson-Prichard Oil Corp. in east central Terry County, Texas. The Terry County operation encountered water at 5,490 ft. and was abandoned at 5,520 ft.

UNGREN & FRAZIER, Abilene, Tex., contracting firm, is skidding rig from a well completed for its own account in the Akard pool, 10 miles northwest of Abilene, Jones County, Texas, to a location for Hedrick Oil Co.

CARL B. KING, Dallas, Tex., contractor and operator, is drilling solid lime below 4,650 ft. in his 1 State, 16-11s-38e, northeastern Lea County, New Mexico. The wildcat test is 3 miles west of the Texas-New Mexico state line.

BREWER Drilling Co., Midland, Tex., has completed a producing well in the Lea County side of the Maljamar, New Mexico, field, drilled jointly with W. J. Rutledge, Jr. The well, in 17-17s-32e, was completed at 4,136 ft. for initial production of 50 bbl. in 24 hours through 2-in. tubing.

RICHMOND Drilling Co., Midland, Tex., is drilling below 4,400 ft. in its western Lea County, New Mexico, wildcat test between the Vacuum and Maljamar fields. The operation is on Shell Oil Co., Inc., farmout acreage in 22-17s-33e. Grayburg lime was topped at 4,125 ft.

DELTA Drilling Co. and Stacy-Edwin are rigging up for an 8,000-ft. Smackover lime wildcat in the Wesson area of Union County, Arkansas, and acreage is being assembled east of Snow Hill in Ouachita County, Arkansas, for a deep test.

JONES Drilling Co. 1 J. D. Wade is a location for a 2,000-ft. rotary test, 467 ft. from the south and east lines of west 160 acres of J. Pearson Survey, Abstract 1050 in Denton County, Texas. Machine is boring into the location.

ROWAN Drilling Co. is moving in material to drill Atlantic Refining Co. 1 Kitty Nash Groce, wildcat test on the flank of Nash dome, Fort Bend County, Texas.

USCAN Drilling Co., Oklahoma City, Okla., has assumed obligation to drill a wildcat well in the center of SW SW 22-19s-35e, Lea County, New Mexico. Contract calls for drill-

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# Contractors

ing to 5,000 ft., unless production is found at a lesser depth. The company's wildcat operation in Lynn County, Texas, is proceeding below 4,900 ft. Operators expect to test the Clearfork which, they say, should be reached around 5,700 ft.

HUMPHRIES & HOTCHKINS, contractors on Simmons Oil Co. 2-C Reagan, extension producer for the Oakville field, Live Oak County, Texas, completed the past week, are moving rig to another location to be drilled by the same operators in that area.

ZEPHYR Drilling Co., Tulsa, has the contract for a west-edge test in the Guthrie pool area of Logan County, Oklahoma, which has been staked as Deep Rock Oil Corp. and W. C. McBride 1 Murphy, NW SE 11-17-2w. The test is 1½ miles west of the Guthrie pool proper.

FALLIS & WISE, drilling for Wilcox Oil & Gas Co. and Ike Howeth in the Alfred area of Jim Wells County, lower Gulf Coast, Texas, have completed the latter's 1 Adams as a producer. The well, completed in a 4,300-ft. sand, marks a west extension to the field.

BREWSTER-BARTLE Drilling Co., Houston, Tex., has been awarded contract to drill a Wilcox sand wildcat test on the Reid tract in the Hillester area, Tyler County, Texas. This company also is moving in rig for a deep test in the Cankton area, St. Landry Parish, Louisiana. This test, 1 Richard, located in 25-8s-1e, will be drilled in the company's own name.

W. J. WALTON, San Antonio, Tex., is drilling a wildcat test for Humble Oil & Refining Co. and Wellington Oil Co. on the Indio ranch, Maverick County, Southwest Texas. At latest report the test was drilling below 3,600 ft.

AL BUCHANAN Drilling Co., San Antonio, Tex., has been awarded contract to drill a 7,000-ft. wildcat test for Plymouth Oil Co. in the Las Animas grant, 9 miles northwest of the Kelsey field, southeastern Jim Hogg County, Texas, the test will be 2 Sweeny. Rig is being moved in.

ROWAN Drilling Co., Houston, Tex., is moving in rig to drill a semi-wildcat test for Atlantic Refining Co. on the north flank of the Nash dome, on the Brazoria-Fort Bend County line. The test, 1 Groce, Allsbury Survery, is in Fort Bend County, Texas.

WIEGAND BROTHERS Drilling Co., San Antonio, Tex., has been awarded contract by Seaboard Oil Co. and Falcon-Seaboard Drilling Co. to drill a 4,500-ft. test in the Pearsall field, Frio County, Texas. It will be 2 Halff & Oppenheimer.

VOORHEES Drilling Co. is contractor for 1 International Migratory Bird Preserve, NW NE SE, Section 24, Livingston County, Michigan, and is also the owner.

*Crew of E. K. Carey Drilling Co. on E. W. Hamilton 1 Ward, Stafford County, Kansas. Buddy Sole, Dufek Sales Co.; Herb Rhoton, tool pusher; T. B. Owens, backup man; O. F. Zimmerman, pipe racker; Pat Naylor, derrickman, and Pete Thompson, driller*


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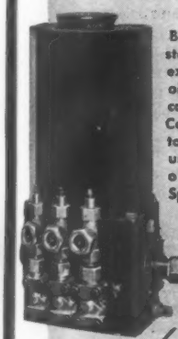

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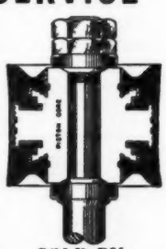

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## LOUISIANA GULF COAST

# Gueydan Field Is Extended In New Producing Zone

By F. L. SINGLETON

NEW ORLEANS, La., Aug. 4.—Completion the past week by Fohs Oil Co. of 3 Mulvey, located on the south flank of the Gueydan field, Vermilion Parish. from a sand in which casing was perforated at 8,755-68 ft., opens a new producing horizon for that field. Previous production in this particular area has come from a 9,300 ft. sand.

The well was completed flowing initially at the rate of 315 bbl. of fluid, 15 per cent salt water, daily through 3/16-in. choke, making with the fluid an estimated 176,000 ft. of gas. Tubing pressure was 1,000 lb. It was drilled to a total depth of 9,756 ft., after testing dry gas in the regular sand. Its location is 700 ft. northwest of 2 Mulvey, marking an extension of the producing area as well as the opening of a new sand.

### Second Test at Lake Side Ready to Drill In

Superior Oil Corp. is preparing to test 1 Calcasieu National Bank, second test for the Lake Side (Lowery) field, Cameron Parish. With 7-in. casing cemented at 10,000 ft., the well will perforate in sands showing oil and gas at 9,868-9,938 ft. The hole originally was drilled to a total depth of 10,422 ft. This hole was sidetracked and a new hole drilled to 10,000 ft., the present total depth. Location is northeast of the discovery gas-distillate well completed several months ago by Lisbon-Iberia Oil Co.

### Hayes Prospect Wild Gasser Still Out of Control

Gulf Refining Co. 1 Calcasieu National Bank, deep wildcat well on the Hayes prospect, Calcasieu Parish, which blew out July 20 giving evidence of another new field was still out of control over the week end. The flow, which had been estimated as much as 100,000,000 cu. ft. of gas daily, ceased momentarily on July 28, long enough to snuff out the flames, but following this the well began blowing out sections of casing and showing signs of cratering. With this, preparations which were being made to cap the well were suspended. Bottom of hole is 10,534 ft., where 7-in. casing had been cemented and perforated at 10,527-29 ft. to test the sand, just prior to the well blowing out.

### SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 10 | 2,198.51 | 78,560 |
| Gas wells: Fields | 1 | ..... | 9,010 |
| Dry holes: Fields | 2 | ..... | 13,691 |
| Wildcats | 2 | ..... | 22,566 |
| Total | 15 | ..... | 123,827 |

### Two New Wells Started in Church Point Area

The new tests are being projected in the Church Point area in Acadia and St. Landry parishes. Stanolind Oil & Gas Co. has made location and is moving in for 1 Twedall, 2,052 ft. northwest along the southwest line from the south corner of the tract, and 126 ft. northeast at right angles, in Section 17-7s-3e, north of the town of Church Point. Dancigar Oil & Refining Co. has location for 1 L. D. Thibodeaux, Section 73-7s-2e, southwest of Church Point. A half dozen tests have been drilled in this area since the prospect was checked in 1933.

### Four Rigs Running at Pine Prairie, Bourg Prospect Test Dry

Sinclair Prairie Oil Co. has abandoned its second deep test on the Bourg prospect in Terrebonne Parish. The test, 1 Alces J. Duplantis, 12-18s-18e, was dry at 11,026 ft. Electrical logs made prior to abandonment revealed no shows.

C. & I. Production Co., discoverer of the new Pine Prarie field, Evangeline Parish, is starting its second test, 2 Evangeline Land & Mineral Co., located about 200 ft. east of the discovery well, 37-3s-1w. Three other companies have rigs running in the field, in which 3 producing wells have been completed to date. Pan American Production Co. is drilling 1 Guillory, 600 ft. north of production. Nicklos Drilling Co. is drilling 1 Reed, 700 ft. southwest of production. Gulf Refining Co. is drilling 1 Schatzkin, just northeast of the Nicklos well.

(Continued on Page 78)

## Kansas Fields

(Continued from Page 69)

Stafford County: Hamilton & Hawkins 1 Ward, NE NE SW 15-23-13w, Simpson 3,766 ft., Arbuckle 3,810 ft., show oil 3,810-14 ft., show oil in core 3,814-17 ft., T.D. 3,824 ft., 40 ft. oil in hole, acid. bailed ¾ bbl. oil in 2 hr., gravity 28.7, more acid, 1,200 ft. fluid in hole, 90 per cent water, S.D.

W. W. Drilling 1-A Wilson, N½ NW NW 5-25-14w, anhydrite 920 ft., Topeka, 3,196 ft., Lansing 3,612 ft., show oil 3,840 ft., show oil 3,906-20 ft., Misener 3,951 ft., spotted saturation 3,951-58 ft., Viola 3,958-67 ft., T.D., with saturation, 7-in. 3,948 ft., drilled plug and bailed water and some show oil.

Trego Count: McKnab 1 Mattke, N½ NW NW 17-12-22w, drilling 3,210 ft.

### Northeastern

Leavenworth County: E. V. Jackson 1 Fevurly, SW SE 1-9-20e, Mississippian lime 1,370 ft., S.D. 1,485 ft.

## Oil Shows Reported in Western Nebraska; McLouth Extended

ST. JOSEPH, Mo., Aug. 4.—Northeastern Kansas took the lead in development in the Forest City basin last week, although new tests were started in Richardson County, Nebraska, and in Knox County, Missouri. Iowa also had three wildcat failures.

The Kansas play was centered around the McLouth pool in Jefferson and Leavenworth counties where both gas and oil production has been found in the Mississippian lime, and Burgess sand and the Bartlesville. Last week three new gas producers were added to the pool and one new oil well, a 50-bbl. black oil well from the Bartlesville (see completions).

Magnolia Petroleum Co., which had the largest of the three gas wells, which gaged 12,000,000 cu. ft., also had a third well about to be drilled in.

Topping the active development at McLouth came the completion last week of a discovery about 2 miles north of the pool at Archie 1 Schroeder, SE SW 28-9-20e, for 20 bbl. of 21.3-gravity oil and 350,000 cu. ft. of gas. Since most opinion of the McLouth structure gives it an unusually large acreage, best bet was that the new well would prove to be an extension to the pool proper, opening the area between for drilling.

### Western Nebraska Wildcats Get Shows of Oil

On the west slope of the Granite ridge in Nebraska, Stone-Anderson Development Co., drilling contractors and operators formerly of Denver, Colo., and now of Lincoln, Neb., were running casing to test a show of oil in the Fort Riley limestone at 324 ft. in 1 Eilers, NW NE 29-6n-10e.

Operators reported they had 235 ft. of dry, loose, granite wash quicksand under the first 80 ft. of top soil which forced them to switch from cable tools to rotary. They succeeded in sealing up the walls of the hole with cement, cotton seed hulls and commercial mud, and noticed a show of oil and gas while still drilling with rotary in the Fort Riley. Casing was run with standard equipment.

Still farther west, in Kieth County, Twentieth Century Oil Co. 1 Steuhm, NW NW 21-14n-37w, was preparing to test what operators considered a good show of oil after plugging back to 2,200 ft. and setting 7-in. casing at 1,850 ft.

### NEBRASKA DRILLING REPORT

Furnas County: Trickett 1 Gossic, NW NW NW 33-2-21w, S.D. 1,390 ft.

Johnson County: Stone-Anderson 1 Eilers, NW NE 29-6n-10e, west slope of Granite Ridge, Fort Riley 324 ft., show oil, running 10-in.

Keith County: O. O. Petroleum 1 Jensen, NW NW NW 26-14-37w, hole caved in from 730-1,120 ft., cleaning out.

Twentieth Century 1 Steuhm, NW NW NW 21-14-37w, T.D. 3,658 ft., in basal Morrison, P.B. 2,200 ft., 7-in. 1,900 ft.

Morrill County: Price 1 Bonner, SE SE SE 10-23-49w, S.D. 4,800 ft.

Nemaha County: Continental Petroleum 1 Gauchat, SW NW NE 26-6n-13e, base Mississippian 1,790 ft., Hunton 2,031 ft., rainbow oil 2,031 ft., 1,900 ft. water in hole 2,060-65 ft., 5-in. 2,031 ft., drilling 2,091 ft.

Palensky 1 Casey, NW NE 7-5n-13e, first report.

Otoe County: H. A. Risk 1 Rietsch, SW SW 1-8-10e, granite wash 1,800 ft., S.D. 1,840 ft.

Richardson County: Harry Harper 1 Horn, S½ NE SE 35-3-16e, drilling 2,112 ft.

Uhri 1-A Ogle, NW SE SE 9-1-14e, old well, Hunton 2,258 ft., T.D. 2,264 ft., P.B. 2,252 ft., butane and acid, pumped 125 bbl. fluid in 24 hr., cut 30 per cent water, installing pump.

Sarpy County: Allen & Sherritt, NW SW 3-12n-11e, surface casing 100 ft., Arbuckle test on 4,000-acre block.

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# Second Producer Drilled in at New Pleasant Grove Field

By R. MARNE SANFORD

DALLAS, Tex., Aug. 4.—The now officially named Pleasant Grove field of Rusk County (formerly called Laneville area) which was first opened late in May, is in line for steady development as new tests are being staked for immediate drilling. The area was first opened by Sears & Phillips 1 J. F. Pool, George May Survey, which, along with the discovery tract, was recently purchased by L. O. McMillan of Dallas. A new official gage for the area opener gives it 215 bbl. daily as against the gage of several weeks ago which was 7 bbl. of oil and 2,000,000 cu. ft. of gas daily. The well is producing from the Woodbine sand through perforations from 4,051-62 ft.

At present McMillan is drilling below 3,295 ft. at 2 Pool, May Survey, 935 ft. west and slightly north of the discovery. The operator has built two 3,000-bbl. storage tanks on the lease, laid a gathering line, and is laying out plot for a field camp and warehouse preparatory to development.

The pool's second producer, M. D. Bryant 1 Evans, May Survey, south offset to the discovery, was preparing to take potential gage as the week closed. It was reported flowing 15 bbl. of oil hourly under pressure of 280 lb. on tubing and 500 lb. on casing. Production is from 4,049-52 ft. through perforations.

Bryant is preparing to start 1 Ashby, May Survey, north offset to the discovery, on a 70-acre tract acquired from Sears & Phillips with the discovery well purchase. West of the discovery nearly a mile G. C. Grasty is due to start 1 Kangerga, Wood Survey, which is to be retested after standing temporarily abandoned for several weeks when water was found at 4,086 ft. Derrick was reported going up for a 1½-mile southeast outpost on the Evans tract held by McMillan in the T. J. Hopgood Survey. Footage for definite location was not announced.

### Chapel Hill Being Unitized For Recycling Project

Representatives of six companies were preparing to confer in Tyler, Tex., over the week end concerning plans for the joint erection of a gas-recycling plant in the Chapel Hill field of eastern Smith County. The plant is estimated to cost $200,000 and expense and operation will be shared by Magnolia Petroleum Co., Sinclair Prairie Oil Co., Humble Oil & Refining Co., Sun Oil Co., Shell Oil Co., Inc., and H. L. Hunt. The plant is expected to have a daily capacity of 25,000,000 cu. ft. of gas with a daily output of about 2,000 bbl of condensate. Actual construction will await further developments in the large-scale unitization efforts being carried on among the numerous small acreage owners in the field.

### Four New Wildcats Are Started

*FRANKLIN COUNTY.*—Spudding was under way as the week closed at a new wildcat attempt in Franklin County which will seek to establish a link between the Sulfur Bluff field of Hopkins County and the Talco field of Franklin and Titus counties. It is W. B. Hinton 1 T. A. Hargraves, S. P. Survey, 8 miles west of Mount Vernon in the northwestern part of the county. Location was staked several weeks ago, but bad weather delayed spudding. Contract depth is set at 4,500 ft.

*COLLIN COUNTY.*—Northeast Collin County will receive a new 4,500-ft. wildcat test with the staking of J. C. Stephenson et al 1 W. C. St. Clair, 600 ft. from the north and east lines of a 192-acre tract in the Benjamine Clark Survey. It will be drilled with rotary and is located about 8 miles southwest of the town of Leonard.

*HUNT COUNTY.*—In the Club Lake area of Hunt County a new wildcat is reported being staked by W. D. Shill of Gladewater, Tex. Southeast of Greenville and in the vicinity of a large Humble block Shill has assembled 1,000 acres and has reportedly requested drilling permit for the A. L. Thompson 21-acre tract in the William Elan Survey. Humble's holdings center around the F. Thweatt and William Christy surveys.

*RED RIVER COUNTY.*—First wildcat operation in some time for Red River County will be Albert Wooley's scheduled location to be staked between Clarksville and Mound City. It will be a 2,100-ft. test on a block of acreage out of the W. Deadman, T.&N.O., and W. T. Snell surveys.

## SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil: East Texas field | 7 | 411 | 25,469 |
| Hawkins | 3 | 417 | 14,552 |
| Talco | 2 | 730 | 8,572 |
| Wildcats | 1 | 215 | 4,128 |
| Other fields | 1 | 4 | 2,998 |
| Gas: Cayuga | 2 | *82.5 | 11,524 |
| Chapel Hill | 2 | †420 | 16,561 |
| Opelika | 1 | †2,548 | 8,287 |
| Total | 19 | | 92,091 |

*Million cu. ft. †Bbl. distillate.

### EASTERN TEXAS COMPLETIONS

#### Wildcats

Rusk County: L. O. McMillan 1 Pool, George May Sur., 6 mi. SW Henderson, 215 bbl. in 24 hr., ¼-in. choke, T.D. 4,128 ft., opened new Pleasant Grove pool.

#### East Texas Field

Longview, Gregg County: Stanolind A-18 Davis, 43 bbl., 3,510-80 ft.
Superior Oil 30 Ingram, 96 bbl., 2½-in. casing outlet, perf. casing 3,670-78 ft., T.D. 3,679 ft.
Longview, Upshur County: F. E. Hargroves 3 Reed, 105 bbl., 3,763-74 ft.
Kilgore, Gregg County: Ed Pace 9 Elder, 42 bbl., 3,540-68 ft.
Ed Pace 12 Elder, 35 bbl., 3,540-77 ft.
Shell 31 Willoughby, 50 bbl., perf. casing 3,542-52 ft., 3,556-78 ft., T.D. 3,600 ft.
Kilgore, Rusk County: Houston 6 Peterson, 40 bbl., 3,632-81 ft.

#### Other Field Completions

Cayuga, Anderson County: Tide Water-Seaboard 7 Lutterloh, 22,500,000 cu. ft. gas in 24 hr., 55 bbl. distillate per 1,000,000 cu. ft. gas, T.D. 7,434 ft.
Tide Water-Seaboard 1 Rannells, 60,000,000 cu. ft. gas per day, T.D. 4,090 ft.
Chapel Hill, Smith County: Chapel Hill Gas 1 Johnson, 241.24 bbl. distillate in 24 hr., ¼-in. choke, gas 3,170,000 cu. ft., T.D. 8,176 ft.
Sun Oil 1 Shotner, 179 bbl. in 24 hr., ¼-in. choke 3,280,000 cu. ft. gas, T.D. 8,285 ft.
Hawkins, Wood County: R. W. Fair 1 Randell, 94 bbl. in 6 hr., ¼-in. choke, 4,460-4,805 ft.
Humble 1 Crisman, 27 bbl. in 24 hr., ¼-in. choke, 4,898-4,923 ft.
Humble 1 T. & P., 99 bbl. in 6 hr., ½-in. choke, 4,354-4,824 ft.
Opelika, Henderson County: Lone Star 1 Turner, 49,000,000 cu. ft. gas, 52 bbl. distillate per 1,000,000 cu. ft. gas, T.D. 8,287 ft.
Talco, Franklin County: Humble 28 Penn-fee, 65 bbl. in 4 hr., pumping, T.D. 4,287 ft.
Humble 29 fee, 116 bbl. in 4 hr., pumping, 4,222-36 ft., T.D. 4,285 ft.
Wortham, Freestone County: J. B. Daniels 1 Stubbs, 4 bbl. in 24 hr., pumping, T.D. 2,998 ft.

### EAST TEXAS ACTIVE WILDCATS

Angelina County: S. D. McDaniel 1 Bonner, Sarah Odel Sur., still swabbing, 1,225 ft.
Camp County: Talco Asphalt Co. 1 McKenzie, L. William Sur., ¾ mile W of Pittsburg field, cored 7,933-48 ft., no show, coring ahead 7,948 ft.
Cherokee County: Bobby Manziel 1 Limber Log School, 4,100 ft. from S and 9,550 ft. from E lines John Vaughn Sur., 4 mi. SW Bullard, drilling 3,910 ft.
Franklin County: W. B. Hinton 1 Hargrove, 467 ft. E and S NE cor. C. C. Dupree Sur., rigging up, first report.
Freestone County: Westbrook & Whistler 1 Coleman, H. Howard Sur., 2½ mi. SW Streetman, S.D. 970 ft.
Gregg County: Roger Lacy 1 Flannigan, 9,450 ft. from S and 1,555 ft. from W lines H. Edwards Sur., drilling 5,840 ft.
Henderson County: British American Oil 1 Young, Joseph Rice Sur., drilling 8,137 ft.
Lone Star Gas 2 Allen, 3,490 ft. from W and 4,780 ft. from S lines John Lawson Sur., rigging up.
A. J. Tyler 1 Dozier, 2,100 ft. from W and S lines G. T. Walters Sur., rigging up, first report.
Limestone County: B. F. Weekly A-2 Barron, 660 ft. out of NE cor. 320-ac. tract in E. Mabry Sur., rigging up.
Rusk County: M. D. Bryant 1 L. R. Evans, 416 ft. from S and 467 ft. from E lines George May Sur., testing, made 17 bbl. in 1 hr., ¼-in. choke, 7 per cent water, T.D. 4,100 ft.
G. C. Grasty 1 Kangerga Bros., 467 ft. from SE and 1,170 ft. from NE lines 100-ac. tract in T. Wood Sur., running 5½-in. casing to 4,109 ft.
R. S. Kirby 1 Richardson, 467 ft. from N and E lines Blk. 5, J. I. Sanches Sur., rigging up.
Smith County: Sun Oil B-1 Sanders, 648 ft. from N and 1,000 ft. from W lines 81.53-ac. tract in Matthew Arnold Sur., set 9⅝-in. casing at 1,418 ft., T.D. 3,285 ft.
Upshur County: Wm. Bradley 1 Robinson, 2,400 ft. from W and 5,075 ft. from N lines John Sanders Sur., derrick and moving in rotary, first report.
Van Zandt County: Hickok & Reynolds 1 Bush, 2,900 ft. from N and 5,500 ft. from W lines P. Young Sur., set 10-in. casing at 200 ft., T.D. 3,600 ft.
Wood County: Roger Lacy 1 Snyder, old well drilling deeper, 2,000 ft. from N and 300 ft. from E lines E. Castleberry Sur., old T.D. 1,750 ft., location, first report.
Bobby Manziel 1 Holmes, 834 ft. from S and 260 ft. from W lines T. J. Rusk Sur., moving in material.
N. P. Powell 1 Markey & Miller, 467 ft. out of SW cor. H. H. Edwards Sur., running electrical log, T.D. 4,924 ft.
Fred Strang 1 Old, 467 ft. from S and 644 ft. from W lines 317-ac. tract J. R. Smith Sur., set 10-in. casing at 200 ft., T.D. 3,900 ft.


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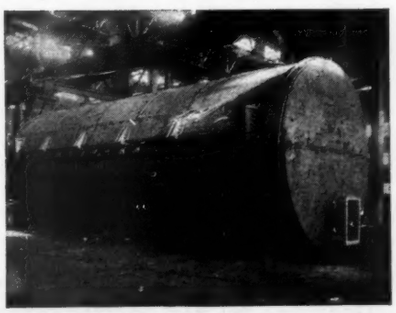

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# Lower Wilcox Sand Strikes Stimulate Wildcatting

By NEIL WILLIAMS

HOUSTON, Tex., Aug. 4.—Extension of production on the recently opened Clodine field, Fort Bend County, was indicated last week as Houston Oil Co. prepared to test 1 Thompson. Total depth of the hole is 7,586 ft. with 5½-in. casing cemented on bottom. Casing is being perforated in the sand at 7,463-74 ft. The well was cored from 7,400 to 7,577 ft. First gas sand was picked up around 7,453 ft.

Location of the well is north of the discovery well (1 Hatfield) completed by Providence Oil Co. last June as a gas-distillate well. The latter perforated in the sand at 7,499-7,502 ft., slightly deeper than the Houston Oil Co. well. Location has been made by Houston Oil Co. for a second test, 1 Blakely-Nelms, west of 1 Thompson. It will be drilled as soon as rig is free from the latter. Providence Oil Co. also is starting its second test, 1 Wing.

## SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Fields | 21 | 4,117.53 | 140,524 |
| Dry holes: Fields | 2 | ..... | 14,014 |
| Wildcats | 4 | ..... | 34,716 |
| Total | 27 | .... | 189,254 |

*FIG RIDGE FIELD.*—A major extension is indicated for the Fig Ridge field, Chambers County, where Texas Co. is preparing to test sand showing oil and gas at 8,550-65 ft. in 1 Broussard, ¾ mile west of production. On an 8-minute drill-stem test of the sand, a recovery of 700 ft. of 37-gravity pipe-line oil with 1,100 ft. of oil-cut cushion water was made. The test was made with ¼-in. chokes and showed a working pressure of 100 lb. Following the test, the hole was drilled to 8,600 ft., where 5½-in. casing was cemented. This will be perforated at the above sand level.

*WEST RANCH FIELD.*—In the West Ranch field, Jackson County, Magnolia Petroleum Co. completed 176-A West ranch, flowing 420 bbl. daily through a 7/16-in. choke from sand in which casing was perforated at 6,158-62 ft. This is a new producing horizon for the field, which already has four producing sands. Location of this well is in the extreme southern part of the field.

*MAURBRO FIELD.*—Wheelock & Collins 1-B McCrory, located about a half mile south of production on the east side of the Maurbro (LaWard) field, Jackson County, has extended the field. In a sand at 5,215-24 ft., with 5½-in. production casing cemented at 5,214 ft., the well came in flowing 151 bbl. daily through a 9/64-in. choke with tubing pressure at 495 lb. and casing pressure 760 lb. Humble Oil & Refining Co. also completed another well in the field in its 5-B Mauritz Brothers.

*JACKSON COUNTY.*—Jackson County generally experienced another active completion week. Along with the two wells at Maurbro, there were four completions at West Ranch, five completions at Lolita and one at Cordele. Drilling in the county also continued unabated with a total of 39 active operations under way. Included in these are 11 rigs in the West Ranch field, 10 in Lolita field, 4 in Maurbro, 3 in West Ganada, 2 in Ganada, 3 in Francitas, 1 in Cordele, and 5 wildcat tests. This is the most activity in any single county or parish anywhere in South Texas or South Louisiana.

### Lower Wilcox Pays Increase Wildcatting

Increased wildcatting activity also is being displayed along the Wilcox trend, where recent uncovering of lower sands in the Wilcox has opened greatly expanded potentialities. New deep Wilcox tests being projected include Pan American Production Co. 1 Texas Long Leaf, A. Viesca Survey, 2½ miles east of Goodrich, Polk County. This test is to be contracted to approximately 9,000 ft.

Navarro Oil Co. has made location for a deep Wilcox sand test in the Hillester area, Tyler County. It will be 1 Reid. Contract has been let for the drilling to Brewster-Bartle Drilling Co. Drilling is expected to be started around August 15.

Republic Production Co. 52 Hurd fee, deep Wilcox test in the Joe's Lake field, Tyler County, made another unsuccessful test with 5½-in. casing perforated at 10,396-10,406 ft., and has resqueezed, preparatory to making another attempt. Total depth of the hole is 10,625 ft.

Although not being started specifically as a Wilcox test, location has been made by H. C. Cockburn for 1 Bender, Montgomery School Land Survey, on the old Tamina prospect, 6 miles southwest of the Conroe field, Montgomery County. This prospect was in the limelight during the Cockfield sand play following the discovery of the Conroe field, and a number of tests have been drilled in the area. For the time being the test will be projected only to 6,000 ft., although it is likely the test will later be carried to the Wilcox if shallower production is not found.

Atlantic Refining Co. is starting a test, 1 Groce, on the north flank of the old Nash dome, on the Brazoria-Fort Bend County line. The test, contracted to Rowan Drilling Co. and projected to 8,500 ft., is in the A. Allsbury Survey, in Fort Bend County. Nash is one of the original, geophysically discovered domes, and was productive for a number of years, but production gradually dwindled to nothing, and for the last several years has been virtually abandoned.

### TEXAS GULF COAST COMPLETIONS

#### Wildcats

Fort Bend County: Providence Oil 1 Settegast, dry, T. D. 7,970 ft.
Jefferson County: A. T. McDannald 1 Hebert Trust, T. D. 10,006 ft., dry.
Matagorda County: Stanolind 1 Wolf, dry, T. D. 9,500 ft.
Wharton County: Barnsdall 1 Wallace-Hancock, dry, T. D. 7,240 ft.

#### Fields

Anahuac, Chambers County: Humble 58 Middleton, 504 bbl. ¼-in. choke, T. D. 7,230 ft.
Blessing, Matagorda County: Texas Co. 2 Pierce-State, 136 bbl., perf. casing 8,290-8,310 ft., ¼-in. choke, T. D. 8,327 ft.
Caplan, Galveston County: Sun Oil 2-27 State, 232 bbl. ½-in. choke, T. D. 6,275 ft.
Cordele, Jackson County: Magnolia 5, Drushel, 28 bbl. ¼-in. choke, perf. casing 2,743-48 ft., T. D. 2,749 ft.
Hillje, Wharton County: Rancho Oil 1 Orsak, 90 bbl. 3/16-in. choke, perf. casing 5,224-37 ft.
Lockridge, Brazoria County: Williams, et al, 1 Houston Ld. & Trust, 57 bbl. 7/64-in. choke, perf. casing 6,335½-36½ ft., T. D. 6,365 ft.
Lolita, Jackson County: Magnolia 26 Mary Mitchell, 176 bbl. 9/64-in. choke, T. D. 5,294 ft.
Magnolia 3 Four Way Ranch, 155 bbl. 9/64-in. choke, T. D. 5,953 ft.
Barnsdall 6 Lazarus, 122 bbl. 7/64-in. choke, T. D. 5,279 ft.
Martha, Liberty County: Stanolind 1 Gordon, dry, T. D. 8,202 ft.
Maurbro, Jackson County: Humble 5-B Mauritz Bros., 168 bbl. ¼-in. choke, T. D. 5,231 ft.
Wheelock, et al, 1-B McCrory-Westhoff, 151 bbl. 9/64-in. choke, T. D. 5,224 ft.
Old Ocean, Brazoria County: The Texas Co. 1 Walker: W. O. 523 bbl. P. B. 9,706 ft., perf. casing 9,692-9,704 ft., T. D. 10,990 ft., 7/32-in. choke.
Harrison & Abercrombie 2 Dailey, 205.53 bbl. ¼-in. choke, T. D. 10,848 ft.
Tide Water, 1 Stevenson, 425 bbl., T. D. 10,801 ft.
Segno, Polk County: Humble 38-B Kirby Lumber, 360 bbl. ¼-in. choke, perf. casing 8,120-60 ft., T. D. 8,186 ft.
Thompson, Fort Bend: H. M. Naylor 8-C Hampil, 158 bbl. ½-in. choke, perf. casing 7,924-26, T. D. 8,100 ft.
West Ranch, Jackson County: American Liberty Oil 9 L-Ranch, 171 bbl. ½-in. choke. perf. casing 5,439-42, 5,448-50 ft., T. D. 5,490 ft.
L. Crouch 4 L-Ranch, 153 bbl. ½-in. choke, perf. casing 5,442-46 ft., T. D. 5,621 ft.
Magnolia 1 Davis, dry, T. D. 5,812 ft.
Withers, Wharton County: The Texas Co. 76-B Pierce Est., 65 bbl. ½-in. choke, T. D. 5,547 ft.
The Texas Co. 96-C Pierce Est., 82 bbl. ½-in. choke, perf. casing 5,360-65, 5,336-48, 5,300-10 ft., T. D. 5,374 ft.

### TEXAS GULF COAST DRILLING REPORT

Brazoria County: Glenn H. McCarthy 1 Triangle, NW extension Chocolate Bayou field, drilling hard shale 10,596 ft., 11,000-ft. test.
Colorado County: W. R. Davis 3-A L. E. Brownston, Garwood extension, drilling hard shale 7,945 ft.
Fort Bend County: R. N. Ranger 1 Mason & Briscoe, John Foster Sur., building derrick.
H. C. Cockburn 1 Leveridge, J. M. McCormack, Peach Bend prospect, sidetracked hole, drilling shale 7,854 ft.
Harris County: Strake & McDannald 1 Oates, (1 Penn.), E. Simpson Sur., NE Dyersdale field, drilling shale 5,865 ft.
Jackson County: Nordstrom Oil 1 V. F. Koile, J. Crabb Sur., 9 mi. NW of Edna, drilling shale, 1,762 ft. (cemented 10¾-in. protection casing 456 ft.
Sinclair Prairie 1 Volkner, Francis F. Wells Sur., Texana area, drilling shale 1,525 ft. (9⅝-in. surface casing cemented 1,304 ft.)
Jefferson County: Humble 1-B Jefferson, Geo. W. Brown Sur., Lovell's Lake field extension, drilling salt water sand 7,745 ft.
Sun 2 John C. Ward Est., W. B. Burton Sur., LaBelle deep test, T.D. 7,625 ft., cemented 9⅝-in. protection casing on bottom, to drill deeper.
Liberty County: Jack Frazier et al 4 Lynott & Buffum, J. Robeson Sur., Hardin area wildcat, drilling shale 1,705 ft. (10¾-in. casing cemented 1,634 ft.)
James R. Nowery et al 4 Geraldine Humphreys, Hardin field, drilling shale 4,075 ft.
Matagorda County: Barnsdall 1 C. T. Doman, P. Burnett Sur., building derrick.
Harrison & Abercrombie 9 Armstrong, NW Old Ocean Field (Brazoria County), drilling sandy shale 10,945 ft.
Montgomery County: Stanolind-Amerada 1 T. A. McWhorter, Thomas J. Nichols Sur., Lake Creek field, building road to location.
Superior 3 T. A. McWhorter, Thomas J. Nichols Sur., Lake Creek field, drilling shale 8,324 ft.
Glenn H. McCarthy 1 Roscoe Sayle, J. Scott Sur., Magnolia Prospect, drilling sandy shale 3,858 ft.
Orange County: Superior 1 East Beaumont Townsite, Nancy Davis Sur., T.D. 4,650 ft., reaming.
Polk County: Pan American 1-B Texas Long Leaf, A. Viesca Sur., 2½-mi. E of Goodrich, new location for Wilcox sand, 9,100-ft. test.
Gulf 48 Wing, deep Wilcox sand test, Segno Field, drilling hard shale 11,212 ft.
Walker County: Hogg Bros. 1 Gibbs & Wynne, NW of Huntsville, Wilcox sand test, drilling 7,610 ft.
Cox & Ferrell, Foster, H. Applewhite Sur., started drilling July 28, cemented 10¾-in. surface casing 1,002 ft.

## Louisiana Gulf Coast

*(Continued from Page 76)*

### LOUISIANA GULF COAST COMPLETIONS

#### Wildcats

Beauregard Parish: Humble 1-B Edgewood Ld. & Logging Co., dry, T.D. 11,541 ft.
Terrebonne Parish: Sinclair 1 Alces Duplantis, dry, T.D. 11,025 ft.

#### Fields

Anse La Butte, St. Martin Parish: Stanolind 1 Totoria, 27,34 bbl. 9/64 in. choke, perf. casing 6,405-40 ft., T.D. 6,488 ft.
Anse La Butte, St. Martin Parish: Bering Oil 1 Anse La Butte Dev. Co., dry, T.D. 5,822 ft.
Anse La Butte, St. Martin Parish: Stanolind 2 Rycade & Stanolind, 240 bbl. 5/32-in. choke, T.D. 6,575 ft..
East Hackberry, Cameron Parish: Texas Co. 24-B State, 30 bbl. T.D. 8,163 ft.
South Crowley, Acadia Parish: Humble 4 Seger, 130,000 ft. dry gas, 3/16-in. choke, T.D. 9,010 ft.
Sulphur, Calcasieu Parish: Union Sulphur 822 fee, O.W.D.D. 115 bbl., 3/16-in. choke, perf. 3,962-4,005 ft., T.D. 4,362 ft.
Sweet Lake, Cameron Parish: Pure Oil 23 Stanolind Fee, dry, T.D. 7,869 ft.
Tepetate, Acadia Parish: Continental 3 Orlego, 192 bbl. 7/32-in. choke, perf. casing 8,303-06 ft., T.D. 8,314 ft.
Villa Platte, Evangeline Parish: Continental 2 Evangeline Securities, 369 bbl. 3/16 in. choke, perf. casing 9,895-9,919 ft., T.D. 10,244 ft.
Villa Platte, Evangeline Parish: Continental 5 Pitre, 332 bbl. 3/16-in. choke, T.D. 10,234 ft.
Villa Platte, Evangeline Parish: Continental 3 Tate, Tate sand 364 bbl. in 20 hrs. ¼-in. choke, Hayes sand 34 bbl. dist. 11 hrs. ¼-in. choke, T.D. 9,034 ft.
Villa Platte, Evangeline Parish: Danciger 6 Vidrine, 348 bbl. ¼-in. choke, perf. casing 10,060-76 ft., T.D. 10,124 ft.
West Cote Blanche, St. Mary Parish: Texas Co. 4 State-West Cote Blanche Bay, 46.17 bbl. 10/64-in. choke, T.D. 5,022 ft.

### LOUISIANA GULF COAST DRILLING REPORT

Allen Parish: W. T. Burton 1 Calcasieu Nat. Bank, 21-5s-3w, East Oberlin area, drilling shale 9,495 ft.
Avoyelles Parish: Joe Humphrey 1 Frazee, 6-3n-3e, drill stem twisted off 6,097 ft., fishing.
Acadia Parish: Danciger 1 Thibodeaux, 73-7s-2e, Church Point area, SE of Bayou Mallet, moving in rig.
Calcasieu Parish: Pan American 1 Louisiana Farm & Stock, 8-11s-9w, Moss Lake prospect, drilling shale 10,040 ft., contract depth 10,100 ft.
Iberia Parish: Texas 2 State-Rabbit Island, Township 18s-8e, in Gulf of Mexico, drilling sticky shale 7,440 ft.
Jefferson Parish: Reece E. Carter 2 Cravens, 3-13s-23e, Westwego Field, rigging up.
Jefferson Davis Parish: Union Sulphur 3 V. Bourgeois, south flank of Welsh Dome, drilling sandy shale 3,205 ft. (cemented 9⅝-in. surface pipe at 2,135 ft).
Lafourche Parish: Gulf 7 State PP, 8-21s-21e, T. D. 8,470 ft., cemented 9⅝-in. casing (protection string) 8,390 ft., drilling plug.
St. Martin Parish: Amerada 1 State 411, 31-11s-10e, drilling sandy shale 4,843 ft.
Texas 17 St. Martin, 21-8s-7e, Plumb Bob Field extension, cemented 7-in. casing 9,446 ft., T. D. 9,447 ft., W. O. C.
St. Landry Parish: Brewster-Bartle 1 Richard, 25-8s-1e, Cankton area, rig.
Terrebonne Parish: Gulf 1 Picou, 70-20s-18e, Lapeyrouse area, S of Houma, drilling shale 11,340-8 ft., to go to 12,000 ft.
Vermilion Parish: Delcambre 1 Ludovic, 54-13s-5e, drilling shale 2,000 ft.

# Deep Test Staked in Greene County on Washington Dome

By STAFF CORRESPONDENT

PITTSBURGH, Pa., Aug. 4.—The first deep test in Greene County, Pennsylvania, is announced by the Natural Gas Co. of West Virginia with its location on the Andrew Workman farm in Richhill Township. On the Rogersville Quad, it is located 3.96 miles south Lat. 40° and 0.70 mile east of Long. 80° 30'. It is about 4 miles NW of Jacktown and starts at an elevation of 1,246 ft. The new test is located on the west flank of the Washington anticline which at Wind Ridge and Jacktown forms a pronounced dome or closure on surface contours. After geophysical research, the test was located on the west flank and considerable distance from the surface axis. The expected depth of lower Devonian (Onondaga) is about 7,200 ft. or subsea 5,954 ft.

**Several Deep Tests Get Gas Shows**

In Armstrong County, the test of Phillips Gas & Oil Co. on the W. T. Biedenbach farm in West Franklin Township on the Kellersburg anticline is drilling at 2,868 ft., having passed through the Bradford sand which was dry. In the Speechley sand at about 2,100 ft., there was about 90,000 cu. ft. of gas. So far, the hole has averaged over 100 ft. a day with standard cable tools.

On Chestnut Ridge in South Union Township, Fayette County, Peoples Natural Gas Co. finally got away from the crooked hole which held them up in 5 Piedmont Coal Co. and are drilling at 6,206 ft. or close to the Tully lime horizon. In the No. 5, this company is drilling at 5,655 ft. Here, New Penn Development Co., William E. Snee et al are drilling 1 Carothers at 2,888 ft. and 1 Kirby at 2,037 ft. Greensboro Gas Co. is down 2,083 ft. in the test on the Barton tract.

In North Union Township, Wasson & Co. et al deepened 2 J. H. Sorg to 7,375 ft. and there picked up considerable gas in the Oriskany sand which showed an open flow of much over 2,000,000 cu. ft. and which was able to put just short of 1,000,000 cu. ft. in the line in 23 hours. The 1 Piedmont well above the watering trough is being deepened by the New Penn Development Co. and is down 7,300 ft. and still in sandy lime 256 ft. below the top of the Oriskany sand. No large pays have been struck but the well is gaging close to 1,000,000 cu. ft.

On Laurel Ridge in Stewart Township, Fayette County, New Penn Development Co. et al are drilling the wildcat on the Gregg L. Neel farm at 8,378 ft. or 74 ft. below the top of the Oriskany sand with no gas or water showing. In Maryland, these operators ran casing to bottom, 5,645 ft., in the wildcat on the Humberson farm on the Accident dome in Garrett County but are now having difficulty in starting the tools below the bottom of the casing.

## SOUTHWEST PENNSYLVANIA COMPLETIONS

**Armstrong County**

Burrell Township: Equitable Gas 2 George McIntire, 60,000 cu. ft. gas, Bradford sand, T.D. 3,335 ft.
Kittanning Township: L. L. Livingood 1 P. F. Baker, 35,000 cu. ft. gas, Speechley and Sheffield sands, T.D. 3,367 ft.
South Buffalo Township: T. W. Phillips 1 Clark Coal Co., 28,000 cu. ft. gas, Speechley sand, T.D. 2,828 ft.
Wayne Township: R. C. Galbraith et al 1 A. Rupp, 89,000 cu. ft. gas, Sheffield sand, T.D. 3,032 ft.

**Clarion County**

Porter Township: New Bethlehem 2 L. C. Bartlett, 141,000 cu. ft. gas, Murraysville sand, T.D. 1,475 ft.

**Fayette County**

Menallen Township: Boyd 1 Homer D. Smith, dry, through Fifth sand, T.D. 2,480 ft.

**Greene County**

Cumberland Township: Equitable 1 Charles S. Hathaway, 33,000 cu. ft. gas, Elizabeth sand 2,965-78 ft., gas 2,967 ft., T.D. 3,067 ft.
Springhill Township: Carnegie 12 Rice, 75,000 cu. ft. gas, Bayard sand 3,180-83 ft., gas 3,181-83 ft., T.D. 3,200 ft.

**Indiana County**

Washington Township: T. W. Phillips 1 D. P. Bothtel, dry, through Bradford sand, T.D. 3,237 ft.

## SUMMARY OF COMPLETIONS

***Southwest Pennsylvania***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Gas wells | 9 | *1.3 | 25,113 |
| Dry holes | 2 | ..... | 5,717 |
| Total | 11 | ..... | 30,830 |

***West Virginia***

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells | 5 | 63 | 9,232 |
| Gas wells | 13 | *6.3 | 34,195 |
| Dry holes | 1 | ..... | 2,551 |
| Total | 19 | ..... | 45,978 |

*Million cu. ft.

**Jefferson County**

Beaver Township: T. W. Phillips 1 Huelett E. Smith, 48,000 cu. ft. gas, Bradford sand, T.D. 3,005 ft.

**Washington County**

West Bethlehem Township: Equitable 1 Amanda Barr, 775,000 cu. ft. gas, Big Injun sand 1,667 ft., gas 1,796 ft., R.P. 720 lb., T.D. 1,804 ft.

## DRILLING

**Armstrong County**

Bethel Township: Local Co. 1 Hannah Hellman, 915 ft.
Boggs Township: John Wray et al 1 John Lightner, building rig.
J. K. Sharp 3 James Sefton, building rig.
Burrell Township: T. W. Phillips 1 Flora Stevenson, 2,720 ft.
J. K. Sharp 1 Lettie Manners, 350 ft.
East Franklin Township: John Wray 1 Samuel Montgomery, rig standing.
Kiskiminitas Township: Apollo Gas 1 Alexander Brown, location.
C. W. Beecher 1 Henry Burkett, spudding.
Duquesne 1 S. Trux, 1,775 ft.
Kittanning Township: James Wright 1 Henry Wright, 250 ft.
T. W. Phillips 1 F. J. Kimple, 1,693 ft.
Manor Township: Local Co. 1 R. H. Iseman, 3,460 ft., cleaning out after shooting Bradford sand.
Mahoning Township: Humphrey, Stone & McCall 1 G. Gould, building rig.
Parks Township: Chestnut Ridge 1 Samuel Orr, 3,175 ft.
Plum Creek Township: Equitable 1 Henry Watterson, 2,319 ft.
T. W. Phillips 2 J. P. Graham, 2,410 ft.
Apollo Gas 1 Baker, 1,500 ft.
Shelocta 2 J. M. Blose, 325 ft.
South Bend Township: John Wray et al 1 Donald Ankemy, S.D. 2,120 ft., repairs.
South Buffalo Township: Local Co. 1 J. R. Hill, 1,285 ft.
Wayne Township: Peoples 1 George Snyder, 1,250 ft.

**Clarion County**

Clarion Township: J. M. Cook et al 4 Clark Elder, 850 ft.
Joseph Galbraith et al 2 W. S. M. Fleming, 660 ft., fishing.
Limestone Township: George Hall 1 M. M. Fairman, S.D. 1,225 ft.
T. Swartsfager 2 B. J. Reinsel, 750 ft.
Monroe Township: Frank Shreffler et al 1 Tate Hughes, 930 ft., reaming.
Frank Shreffler et al 1 E. L. Phillips, 250 ft.
Owens-Illinois 1 Scott Barnhart, 2,645 ft.
Porter Township: Hanley & Bird 1 J. G. Wilson, 1,420 ft.
Pennsylvania Fuel Supply 4 Charles George, location.
Red Bank Township: T. W. Phillips 1 J. C. Swarts, 445 ft.

**Fayette County**

German Township: Eberly et al 2 Stephen Haninosky, 1,278 ft., fishing.
Menallen Township: Greensboro Gas Co. 1 Jacob Harris, 906 ft., lost bit, to skid rig.
Greensboro Gas 1 Carl M. Biddle, 30 ft.
George H. Bortz et al fee, 835 ft.
Victor Piccollomini 1 Paul Zekel, 1,285 ft.
Nicholson Township: Boyd 1 Morris, 2,471 ft.
Blaho & Tedrow 1 Hartley heirs, 1,200 ft.
Greensboro Gas 1 Alfred Cincy, building rig.
Duquesne 1 Carl Kosack, spudding.
Wahler-Powers 2 Melvin Woodrich, 720 ft., fishing.

**Greene County**

Gilmore Township: M. D. Tustin et al 1 Tustin, Big Injun 2,295-2,525 ft., gas 2,325-2,326 ft., gage 103,000 cu. ft., drilling 2,560 ft.
Jefferson Township: Equitable 1 Charles T. Stillwell, spudding.
Monongahela Township: Donley & Lough 1 Mrs. Eli Boone, 240 ft.
Donley & Lough 1 Vance, rig standing.
Wahler-Powers 1 Chester Cumpston, 40 ft.
Perry Township: Equitable 1 M. C. Keener heirs, 2,325 ft.
Wayne Township: Manufacturers 1 Walter Brewer, 100 ft.
Manufacturers 2 Haisi Tustin, rig completed.

**Indiana County**

Armstrong Township: Peoples 1 William O. Anderson, 22 ft.

**Jefferson County**

Beaver Township: T. W. Phillips 1 Lily Smith, 2,375 ft.
T. W. Phillips 2 I. A. Carrier, S.D. 475 ft.

**Washington County**

Amwell Township: Chivers et al 2 Lucille Frazee, 1,155 ft.
Morris Township: Carnegie 2 Baldwin, 460 ft.
Union 1 F. B. Grimes, rig completed.
North Strabane Township: 1 Devore, 2,640 ft.
South Franklin Township: Carnegie 4 Harvey F. Taylor, building rig.
Carnegie 1 Nelan heirs, S.D. 1,780 ft.
Somerset Township: Equitable 1 Albert Jones, 2,678 ft.
West Bethlehem Township: Equitable 1 Roberts, 2,060 ft.
Center Township: Morgan Henderson 5 John Metz (Weir) building rig.

**Westmoreland County**

Allegheny Township: Apollo Gas 2 S. D. Kepple, 1,630 ft.
Bell Township: Apollo Gas 2 David Blair, 1,045 ft.
Franklin Township: Peoples 1 Sarah C. Doyle, 2,400 ft.
Derry Township: Latrobe Steel Springs 1 Charles Remaley, 840 ft.
Upper Burrell Township: Peoples 1 J. and M. Scott, 3,760 ft.
Washington Township: Peoples 1 A. J. Iddinger, 192 ft.

## Ravenswood, W. Va., Test Drilling in Oriskany Sand

In Ravenswood district, Jackson County, the wildcat of Joe Rubin et al topped the Oriskany sand at 4,884 ft. on the W. B. Smith farm and is drilling at 4,934 ft. The gage here tests only 174,000 cu. ft. On the G. H. Ott farm, this operator topped the Oriskany sand at 4,989 ft. with a show of gas at the top of the sand and it is drilling at 4,994 ft. In the wildcats in this district often a small volume shoots into a fair well.

In Monongalia County, the wildcat of the Hope Natural Gas Co. on the H. C. Greer et al lease in Morgan district reached 6,865 ft. and there a pocket of gas caused a cave and the tools were lost. The line was whipped off and it is being cleaned for fishing. In Lewis County, the rotary test of this company is shut down at 4,645 ft. on the Albert Woofter farm with a fishing job.

**Calhoun County**

Center district: Hope Natural 8538 Lee Gainer, 381,000 cu. ft. gas, Injun sand, T.D. 2,160 ft.
Sheridan district: South Penn 2 Frank E. Rothlisberger, 15 bbl., Maxton sand, T.D. 1,771 ft.
Washington district: Hope Natural 8547 W. C. Conley, 1,550,000 cu. ft. gas, first salt sand 860-980 ft., second salt 1,250-1,285 ft., gas 1,271-85 ft., T.D. 1,285 ft.

**Clay County**

Henry district: Virginian V-1269 Brown, Swann & Goshorn, 10 bbl., Injun sand, T.D. 1,791 ft.

**Gilmer County**

Center district: Hope Natural 3583 Leola Blackshere, drilled deeper, Big lime 2,362-87 ft., oil 2,362-86 ft., gas 2,387 ft., 82,000 cu. ft. and 38 gal. oil in 6 hr., T.D. 3,041 ft.
DeKalb district: McCall Drilling 1 P. J. Fling, 67,000 cu. ft. gas, Big lime 1,900-65 ft., Big Injun 1,965-2,040 ft., gas 1,910-15 ft., gas 1,961-63 ft., T.D. 2,080 ft.
Hope Natural 8542 G. W. Bennett, 125,000 cu. ft. gas, second salt sand 1,310-1,344 ft., Maxton sand 1,778-1,852 ft., Big lime 1,907-80 ft., Big Injun 1,980-2,048 ft., gas 1,333-1,704 ft., 1,782 ft., 1,907 ft., 2,037 ft., T.D. 2,078 ft.
Glenville district: Pittsburgh & West Virginia 7830 B. S. Messenger, 95,000 cu. ft. gas, Big Injun 1,820-1,941 ft., gas 1,933-36 ft., T.D. 1,966 ft.

**Harrison County**

Grant district: Hope Natural 4099 V. B. Washburn 97,000 cu. ft. gas, Fifth sand 2,105-2,127 ft., gas 2,107-2,109 ft., T.D. 2,140 ft.

**Kanawha County**

Big Sandy district: Peter Silman 30 James F. Brown, 2 bbl., Weir sand, T.D. 2,034 ft.

**Lincoln County**

Duval district: South Penn 2 H. L. Vickers, 500,000 cu. ft. gas, Berea, T.D. 2,401 ft.
Jefferson district: Bulger Gas 1 Gilbert Dotson, 200,000 cu. ft. gas, brown shale, T.D. 3,868 ft.
Union district: A. F. Morris, agent, 2 Fulton Sias, 53,000 cu. ft. gas, started deepening 2,060 ft., brown shale 3,060-3,380 ft., Corniferous lime 3,835 ft., shot 3,072-3,837 ft.

**Mingo County**

Warfield district: McKinley Trent, trustee, 5 Noah A. Stepp, 240,000 cu. ft. gas, Maxton sand 1,627-1,702 ft., Big lime 2,091-2,314 ft., Keener 2,314-2,336 ft., Big Injun 2,336-2,408 ft., T.D. 2,408 ft.

**Ritchie County**

Grant district: McBurney et al 1 D. W. Satterfield, 30 bbl., Maxton sand, T.D. 1,658 ft.
West Virginia Investment 1 J. T. Kelly, dry, Berea, T.D. 2,551 ft.
P. J. McDonough 2 J. W. Mason, 26,500 cu. ft. gas, show oil, Squaw sand.

*(Continued on next page)*

# More Big Wells at Reed City Turn Attention to Outposts

By OTTO C. PRESSPRICH

SAGINAW, Mich., Aug. 4.—As completions increased in the unbroken succession of big producing wells in Michigan's booming new Reed City oil field, attention focused on tests which will serve to reveal extent of the prolific area.

On the heels of the Pure Oil Co. success with its 1 Lomp and Gulf Refining Co. with 2 and 3 Henry tests, Gulf last week added another big producer, completing in Section 31 the 1 Wilson which produced initially at a rate estimated at 3,360 bbl. a day natural. The three other wells are in Section 30. With rotary tools Gulf had the Wilson cased in 15½ days, believed to be the fastest time ever made in the state. Depth of the well is 3,599 ft.

## SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Bay County | 1 | 85 | 2,909 |
| Gladwin County | 1 | 90 | 3,543 |
| Osceola County | 4 | 11,340 | 14,457 |
| Roscommon County | 1 | 10,000 | 3,428 |
| Gas wells: Clare County | 1 | *23 | 1,278 |
| Isabella County | 1 | *2.3 | 1,297 |
| Montcalm County | 1 | *0.79 | 1,248 |
| Dry holes: Allegan County | 2 | | 3,264 |
| Gladwin County | 1 | | 1,610 |
| Oceana County | 1 | | 2,879 |
| Shiawassee County | 1 | | 1,838 |
| Van Buren County | 3 | | 3,888 |
| Total | 18 | | 41,649 |

*Million cu. ft.

Near a depth of 3,000 ft. Gordon Oil Co. 1 State, in Section 29, is one of the spots of interest. It is a mile east of the Weber Oil Co. 1 Clark, farther north and the field's biggest initial producer. Gulf also has set location for a test in Section 19, and Swanson Consolidated Oil Co. has a location in Section 15, Pinora Township, Lake County, 3 miles north and west of production. In Section 1, Hersey Township, C. L. McGuire, Inc., 1 Watson wildcat, has reset casing to drill beyond the 3,780 ft. at which water was encountered in Monroe formation.

### Four Tests Under Way In Roscommon Area

With the Eugene Hilliard 1 State discovery in Roscommon County already having produced 50,000 bbl. of oil in a little more than a month, that new area also is getting bigger play. Pure Oil Co. is drilling an east offset, Freeman Oil Co. is drilling ½ mile north and west. Two other tests have been located a mile southeast and directly south of the Hilliard well.

### Arenac and Clare Counties Active

In Adams Township, Arenac County, Don Rayburn 1 Fox, Section 21, has been deepened without success to 4,500 ft. At around 4,300 ft. in the Monroe it was good for about 20 bbl. a day. Rayburn also is deepening A-1 Ostrosky in Section 22, a mile east of the Fox, the aim being Monroe production at around 4,300 ft.

Sun Oil Co. 2 McKenna in Hamilton of Clare County was completed as a gas well with initial production in excess of 23,000,000 cu. ft. from the Michigan stray and in Clare's Winterfield area Sun Oil was ready for Monroe testing of three oil drilling operations.

### Eighteen New Tests Reported

Eight of the 18 completions recorded last week were dry holes and included wildcat tests in Oceana and Shiawassee County. A projected Huron County location was abandoned and in Isabella and Monroe counties two small gas wells were reported.

The state Conservation Department issued 18 drilling permits for 12 counties to bring the total for the year to 494. Osceola, again leading with four permits, was followed by Allegan, Isabella and Van Buren, each with two. One each went to Lenawee, Mecosta, Otsego, Muskegon, Gladwin, Lake, Macomb and Midland counties.

### New Group to Develop Gas Area

Leslie T. Barbour, of Edmore, Mich.; Burke White, of Mount Pleasant; and John Borden, of Chicago, have organized the Bar-Bor Oil & Gas Co. and plan to explore in Otsego County for Antrim formation gas. The company is drilling its first test 2 miles from Gaylord.

### MICHIGAN COMPLETIONS

**Allegan County**

Otsego Township: W. Spencer Cook 1 Oatman wildcat, NW SE NE 3-1n-12w, dry, Traverse, T.D. 1,523 ft.
Salem Township: James S. Brailey 1 TerMeer, NW NW SE 20-4n-13w, wildcat, dry, Traverse. T.D. 1,741 ft.

**Bay County**

Kawkawlin Township: Chapman Oil Co. 1 Duso, SW NE NE 34-15n-4e, pumping 85 bbl., acid, Monroe, T.D. 2,909 ft.

**Clare County**

Hamilton Township: Sun Oil Co. 2 McKenna et al, S½ NE SW 15-19n-3w, 23,028,000 cu. ft. gas, T.D. 1,278 ft.

**Gladwin County**

Beaverton Township: Columbia Gas & Oil Co. 1 Beebe-Palmer, SE SE SE 28-17n-2w, wildcat, dry, T.D. 1,610 ft.
Bentley Township: Stork Oil Co. 1 Sichterman, NE NW NW 29-17n-2e, pumping 90 bbl., acid, Dundee, T.D. 3,543 ft.

**Isabella County**

Deerfield Township: L. & S. Drilling Co. 2 Winesburg comm., NE NW SE 19-14n-5w, 2,285,000 cu. ft. gas, T.D. 1,297 ft.

**Montcalm County**

Richland Township: Belvidere Oil Co. 1 Keeler comm., C SE 7-12n-5w, 790,000 cu. ft. gas; T.D. 1,248 ft.

**Oceana County**

Greenwood Township: Welsh Oil Co. 1 Branstorm, SW SW SW 12-13n-15w, wildcat, dry, Dundee, T.D. 2,879 ft.

**Osceola County**

Lincoln Township: Gulf Refining Co. 2 Henry, SE SE NW 31-18n-10w, 1,680 bbl. est., naturally, Monroe, T.D. 3,612 ft.
Gulf Refining Co. 3 Henry, C S½ NE NW Sec. 31, 2,400 bbl. est., naturally, T.D. 3,626 ft.
Gulf Refining Co. 1 Wilson, C S½ NW SE Sec. 30, 3,360 bbl. est., naturally, T.D. 3,599 ft.
Pure Oil Co. 1 Lomp, NW NW NE Sec. 31, 3,850 bbl., est., naturally, T.D. 3,620 ft.

**Roscommon County**

Roscommon Township: Eugene Hilliard A-1 State, C S½ SE SE 34-21n-3w, 10,000 bbl. est., naturally, Traverse limestone, T.D. 3,438 ft.

**Shiawassee County**

Perry Township: O. A. Daniels 1 Mahala-Garrity, NE NE NE 27-5n-2e, wildcat, dry, T.D. 1,838 ft.

**Tuscola County**

Akron Township: Turbush & Duncan 1 Roberts, NW SW NE 30-14n-8e, location abandoned.

**Van Buren County**

Bangor Township: Martin W. Hyenga 1 fee, SW SW SE 32-2s-16w, wildcat, dry, T.D. 1,502 ft.
Columbia Township: Clapsaddle & Harris A-1 Parisian, C E½ NW 13-1s-15w, dry, T.D. 1,276 ft.
South Haven Township: Lang & Lewis 1 Peterson, NE SW SE 26-1s-17w, wildcat, dry, T.D. 1,110 ft.

## Permian Basin, Panhandle

(Continued from Page 71)

Honolulu 7-B Mallett, 1,353 bbl., 2-in. casing outlet, 9,000 gal. acid, 4,945-5,003 ft.
Magnolia 9-G Mallett, 1,269 bbl., 3-in. casing outlet, 10,500 gal. acid, 4,935-5,003 ft.
Mid-Continent 5-B Mallett, 1,265 bbl., 3-in. casing outlet, 11,000 gal. acid, 4,970-5,034 ft.
J. R. Sharp 2 Stallings, 475 bbl., 2-in. casing outlet, 10,000 gal. acid, 4,843-4,957 ft.
Stanolind 2 Givan, 1,761 bbl., 2-in. casing outlet, 10,250 bbl., 4,940-5,010 ft.
Stanolind 19-A Slaughter, 1,466 bbl., 2-in. casing outlet, 9,750 gal. acid, 4,890-4,905 ft.
Texas 7-E Mallett, 1,612 bbl., 3-in. casing outlet, 10,000 gal. acid, 4,975-5,025 ft.
Texas 18 Slaughter, 1,010 bbl., 10,000 gal. acid, 4,925-85 ft.
Texas 21 Slaughter, 1,344 bbl., 3-in. casing outlet, 10,000 gal. acid, 4,920-90 ft.
Slaughter, Terry County: Honolulu 2 Frazier, 1,873 bbl., 2-in. casing outlet, 9,000 gal. acid, 4,930-5,005 ft.
Wasson, Yoakum County: Aloco Oil 14-A Miller, 746 bbl., 10,000 gal. acid, 4,920-5,178 ft.
Argo Oil 7-C Comer, 1,082 bbl., 5,000 gal. acid, 4,930-5,170 ft.
Deep Rock Oil 3 Anderson, 242 bbl., 4 per cent water, 7,000 gal. acid, 5,110-5,245 ft.
Plymouth Oil 3-A Bennett, 243 bbl., ¾-in. choke, 8,500 gal. acid, 5,100-5,267 ft.

### NORTHERN WEST TEXAS ACTIVE WILDCATS

Andrews County: Mascho Oil 1 Texas-University, Sec. 11, Blk. 13, University Sur., drilling 4,690 ft.
Mascho Oil 1 Fisher, NE NE SE Sec. 16, Blk. 36-A, P.S.L. Sur., prepare to acidize, T.D. 4,602 ft., P.B. 4,589 ft., S.D.
Cochran County: Helmerich & Payne 1 Slaughter, 330 ft. from N and 290 ft. from W lines, Lbr. 67, Lge. 136, Armstrong C.S.L. Sur., 5,500-ft. test, show oil 4,677-98 ft., drilling 4,770 ft.
Caines County: Amon G. Carter 4-D Wasson, NW SE Sec. 50, Blk. AX, P.S.L. Sur., set 5½-in. casing at 10,615 ft., T.D. 11,108 ft., tight well, no report.
Garza County: Ed McAdams 1 K. Stoker, 1,320 ft. from S and E lines NE¼ Sec. 942, Blk. 97, H.&T.C. Sur., 3,500-ft. test, fishing tools 2,528 ft.
Lubbock County: L. C. Harrison 1 Nairn, Sec. 25, Blk. A, John H. Gibson Sur., 7-in. at 4,857 ft., T.D. 4,891 ft.
Lynn County: Uscan Drilling Co. (formerly Ross Sport) 1 J. E. Rice, 660 ft. from N and W lines Sec. 18, Blk. 11, E. L. Sur., 5,500-ft. test, drilling 4,826 ft.
Mitchell County: G. R. Anderson 1 Simpson, 2,310 ft. from S and 330 ft. from E lines Sec. 65, Blk. 97, H.&T.C. Sur., drilling 985 ft.
Humble 1 Ellwood, 1,980 ft. out of E cor. Sec. 49, Blk. 16, S.P. Sur., 8,500-ft. test, M.I.M.

## TEXAS PANHANDLE

AMARILLO, Tex., Aug. 4.—Completions and new locations ran about even the past week with 22 new starts reported and 21 completions registered. Of the 21 finals there were 19 oil wells and 2 failures. The total new daily initial production amounted to 4,629 bbl.

### TEXAS PANHANDLE COMPLETIONS

(24-hr. pumping gages)

**Carson County**

Texas Co. 12 Moore, 29 bbl., 8 hr., 170-qt. shot, 3,075-3,146 ft.
Texas Co. 6 Noel, 64 bbl., 190-qt. shot, 3,180-3,225 ft.

**Gray County**

King Oil 10 Donkin, 139 bbl., 120-qt. shot, 3,228-80 ft.
Skelly Oil 127 Schaffer, 427 bbl., 380-qt. shot, 3,225-3,306 ft.
Texas Co. 3 Davidson, 83 bbl. in 10 hr., 150-qt. shot, 3,055-3,120 ft.
Texas Co. 20 Davis, 319 bbl., flowing, 2,808-30 ft.
Texas 12 Harrah, 258 bbl., 265-qt. shot, 3,160-3,250 ft.
Texas Co. 34 Saunders, 173 bbl., 245-qt. shot, 2,800-80 ft.
J. L. McMahon 2 Lovett, 33 bbl., 720-qt. shot, 2,821-2,931 ft.
Skelly Oil 128 Schaffer, 388 bbl., 400-qt. shot, 3,180-3,254 ft.
Texas Co. 7 Brown, 75 bbl., 200-qt. shot, 3,190-3,280 ft.

**Hutchinson County**

Gibson Oil 2 Jameson, 181 bbl., 275-qt. shot, 2,916-55 ft.
Phillips 64 Cockrell, 177 bbl., 400-qt. shot, 2,783-2,-887 ft.
Phillips 77 Cockrell, 306 bbl., 400-qt. shot, 2,955-3,-075 ft.
Phillips 1 Graham, dry at 3,364 ft.
Texas Co. 35 Lewis, 47 bbl. in 8 hr., 195-qt. shot, 2,897-2,990 ft.
Power Pet. 10 Haile, 258 bbl., 395-qt. shot, 2,987-3,-035 ft.
J. Gordon Burch 11 Weatherly, 1,170 bbl., natural, granite wash pay, 3,030-3,110 ft.
Cree & Hoover 10 Haile, 149 bbl., natural, granite wash pay, 3,008-65 ft.

**Wheeler County**

Fain & McGaha 1-C Grogan, dry in granite at 1,394 ft.
Teci Prod. Co. 4 Stewart, 103 bbl., natural, 2,077-2,-115 ft.

### SOUTHEAST NEW MEXICO COMPLETIONS

**Wildcats**

Eddy County: W. D. Flynn 1 Evans, SW SW 18-17-25, dry, T.D. 958 ft.

**Fields**

Cooper, Lea County: Skelly 1 Cooper, NE SW 12-24-36, 107 bbl., T.D. 3,607 ft.
Halfway, Lea County: Argo 2-A Texas State, SW SW 16-20-32, dry, T.D. 2,696 ft.
Loco Hills, Eddy County: Stroup & Yates 3-B Ballard, SW SW 8-18-29, 250 bbl., T.D. 2,485 ft.
Maljamar, Lea County: Carper 2-R Simon, NW SE 30-17-32, 150 bbl., T.D. 3,890 ft.
Red Lake, Eddy County: Ployhar 4 State Spurck, NE NW 24-17-27, dry, T.D. 475 ft.
R. J. Johnson 3 Travis, SW NW 25-17-27, dry, T.D. 540 ft.

## Appalachian Fields

(Continued from Preceding Page)

**Wayne County**

Union district: Chartiers 1 Emmer Damron, 6 bbl., Big lime 1,062-1,310 ft., Big Injun 1,318-1,510 ft., Berea 1,953-61 ft., T.D. 1,978 ft., oil in Berea and shot.

**Jackson County (Oriskany)**

Ripley district: Columbian Carbon 4 Helen M. Hoge 2,893,000 cu. ft. gas after shot, salt sand 1,720-1,816 ft., Big lime 1,816-1,936 ft., Big Injun 1,936-1,993 ft., Corniferous lime 5,005-5,108 ft., Oriskany 5,108 ft., gas 5,108 ft. and 5,140 ft., T.D. 5,188 ft.

## MISSISSIPPI AND SOUTHEAST

# North Tinsley Basal Eutaw Shows High-Gravity Oil

By GEORGE WEBER

JACKSON, Miss., Aug. 4.—Drill-stem tests taken at Union Producing Co. 2 Powell, a north edge test at Tinsley, last week showed good recovery of 48.5-gravity oil. The test is located north of the company's 1 Powell, which last year opened first production in the Tuscaloosa formation. The current test is now drilling for the Tuscaloosa, having tested sands lying deep in the Eutaw formation, below the Stevens sand zone.

The edge test encountered broken tight sand at 5,430-55 ft. which showed oil, and may correspond to the Slick sand, proven for production in Slick Urschel Oil Co. 7 Slick about ½ mile to the southwest. The test was deepened and a tight silty sand was found at 5,763-74 ft. with porous oil sand at 5,774-85 ft. A drill-stem test at 5,744-69 ft. showed a recovery of 250 ft. of oil and 200 ft. of oil and mud in 10 minutes using ⅝-in. chokes top and bottom. A second test, taken at 5,744-79 ft., using the same size chokes recovered 2,000 ft. of oil and 115 ft. of oil and mud in 8 minutes. A third test was made after deepening the well 10 ft. more and at 5,744-89 ft. 1,785 ft. of oil and 240 ft. of oil and mud was recovered. The oil showed a gravity of 48.5° A.P.I. at 95° F. and no salt water was encountered.

This sand is believed to be a stray member of the Eutaw formation, for it was not tested in the company's 1 Powell, drilled in the center of the 40-acre tract due south of the current drilling tract.

### SUMMARY OF COMPLETIONS

| | No. | Bbl. | Footage |
|---|---|---|---|
| Oil wells: Tinsley | 3 | 2,850 | 15,488 |
| Dry holes: Wildcats | 3 | ..... | 19,342 |
| Total ..... | 6 | ..... | 34,830 |

### Outpost Drilling at Tinsley Concentrated on West

Interest is strong in the southwest extensions to the Tinsley field. W. G. Ray Drilling Co. is approaching the Woodruff zone in an outpost test in 2-9n-3w, and Union Producing Co. indicates a ½-mile westward extension to the sector, by finding Woodruff oil sand in 1 Williams, in 35-10n-3w. The test is reported to have encountered the zone at 4,744 ft. and to have shown 10 ft. of section.

The 1 Williams is located due west of the recently developed southeast extension area, and its success in making a producer will further encourage drilling in that direction. Since the southeast trend was halted several weeks ago, by salt water in the Woodruff zone, the play has swung south and west from the new area. Several sections west of the current outpost remain to be drilled. Westward exploration has been pushed gradually, since the high area, showing no Woodruff section lies due north, and it is not yet known whether or not the sand will reappear to the west and southwest. At present a front over 2 miles in length remains to be explored, and future drilling in Tinsley may be expected to take place along that undefined edge of the field.

### Wildcatting and Exploration Spreads Throughout Southeast

Core drilling is being adopted still more in Mississippi, as a supplement to geophysical exploration, and both types of work are showing marked increases recently. Core-drill operations are under way in Monroe, Yazoo, Leake, Lamar and Chickasaw counties, and a total of 30 geophysical crews are shooting in the four states. Mississippi leads in geophysical work with 20 crews active, and the remainder are distributed, 6 in Alabama, 3 in Florida and 1 in Georgia.

Bering Oil Co. staked a new wildcat test in Wilkinson County last week, and is arranging to spud shortly, it is reported. Three wildcats were abandoned in Mississippi recently, in Stone, Montgomery and Yazoo counties. The latter, K. Hughes et al 1 G. C. Woodruff, failed to prove production 2½ miles northeast of Tinsley. Slick-Urschel Oil Co. is drilling deeper in 1 McGraw, located 1¼ miles north of production at Tinsley, having found no shows in the Woodruff, Perry or Stevens horizons. The new stray sand encountered and tested last week by Union Producing Co. on the north edge of the field may show in the 1 McGraw, and that horizon, not yet reached, will be watched with interest.

In Alabama, operations on the deep Union Producing Co. 1 Waite, in Clark County, may be interrupted this week by a flood, threatened by the Tombigbee River, which flows adjacent to the test. Operators are drilling below 9,295 ft. but preparations are being made to anchor equipment and prepare to shut down if the threat materializes.

A new wildcat was tentatively staked in Greene County, Alabama, by W. S. Sistrunk, on a 9,000-acre tract in Township 23n, Range 2w, with the Ordovician as object.

### MISSISSIPPI COMPLETIONS

Wildcat, Montgomery County: Henderson Oil Co. 1 School Land, SE NE NW 16-19n-6e, T. D. 4,280 ft., dry, top Selma 2,090 ft.

Wildcat, Stone County: Danciger Oil & Ref. Co. 1 Stone County, SE SW 16-2s-11w, T. D. 8,522 ft., dry, top Selma 5,716 ft., Eutaw 6,923 ft., Tuscaloosa 7,102, marine Tuscaloosa, 8,005 ft.

Wildcat, Yazoo County: K. Hughes 1 G. C. Woodruff, NE SE 19-11n-2w, T. D. 6,540 ft., dry, top Selma 5,252 ft., Eutaw 5,693 ft., no shows in producing sands at Tinsley.

Tinsley, Yazoo County: Hassie Hunt 1 S. Cessna, NW NE SW 7-10-2, 243 bbl., 22/64-in. choke, T. P. 45 lb., T. D. 5,611 ft., 7-in. casing 5,600 ft., perf. 5,371-96 ft. Perry sand.

Magnolia Pet. Co. 3 Mitch Payne, SW SW SW 36-10-3, 1,927 bbl., open 2½-in. tubing, T.P. 40 lb., T.D. 4,851 ft., 7-in. casing 4,824 ft. Woodruff zone.

Midstates Oil Corp. 3 W. F. Cummings, SE SW SE 31-10-2, 680 bbl., open 2½-in. tubing, T. P. 20 lb., T. D. 4,986 ft. Woodruff zone.

### ALABAMA WILDCATS

Fayette County: J. W. Mills 1 W. C. Musgrove, C NW 10-15s-12w, drlg. 495 ft.

Franklin County: E. O. Heath, Jr. 1 W. O. Hester, SW SW 4-6s-12w, drlg. 970 ft. black shale.

Lauderdale County: G. F. Mercer 1 Patterson, NW SE 8-2s-12w, drlg. 615 ft., asphalt shows 55 ft. & 232 ft., gas show 363 ft.


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## CANADIAN FIELDS

# Wells Drilling in Lake Erie To Increase Gas Supply

By VICTOR LAURISTON

CHATHAM, Ont., Aug. 4.—Crude production from Turner Valley for the first 6 months of 1941 totaled 4,611,311 bbl. compared with 3,428,592 bbl. for the same period of 1940. The figure establishes a new record for 6 months. The trend of production is shown by the comparative monthly figures for 1940 and 1941, in barrels:

| Month— | 1940 | 1941 |
|---|---|---|
| January ..... | 441,564 | 754,384 |
| February ..... | 611,581 | 693,213 |
| March ..... | 529,604 | 802,784 |
| April ..... | 594,360 | 782,815 |
| May ..... | 634,229 | 803,930 |
| June ..... | 617,254 | 774,241 |

The figures do not include absorption-plant gasoline, which will run about 135,000 bbl. for the 6 months.

Production from all Alberta fields for the week ended July 21 averaged 27,751 bbl. daily, including 26,809 bbl. of crude and 639 bbl. of absorption gasoline from Turner Valley, 51 bbl. of crude from the Steveville-Princess field, and 252 bbl. from other fields. The daily average compared with 27,648 bbl. for the previous week and 28,290 bbl. for the corresponding week of 1940.

### Means Sought to Increase Ontario Production

Consequent on the shortage and prospective rationing of gasoline, Ontario oil operators and government officials are studying the possibilities of increasing crude production from the old shallow fields of southwestern Ontario. The major fields at Petrolia, Oil Springs, and Bothwell, with some smaller pools, have been producing in some cases for upward of 70 years, and still account for most of the Ontario crude production, aggregating somewhat in excess of 500 bbl. daily. In the past temporary gains in production have been secured by cleaning out and reconditioning the old wells; and it is also felt that repressuring by a systematic checkup on the plugging of all abandoned wells would help. Members of the Oil Men's Association feel that increased costs of casing, piping, and other supplies make production unprofitable at present prices of crude.

At one time the federal government paid a bonus of 1½ cents per imperial gallon on crude production in Ontario, but this was discontinued about 15 years ago. A. R. Crozier, acting natural gas commissioner for the province, states that while the provincial government would not likely consider taking an active part in development, it might assist financially in the development of promising properties.

### Alberta Natural-Gasoline Price Increased

Retroactive to July 16, 1941, Imperial Oil, Ltd., has announced increases in field prices for natural gasoline produced in Turner Valley absorption plants. Under the new schedule, 20-lb Reid vapor pressure natural gasoline is increased 34 cents a barrel to $2.28; and 17-lb. Reid vapor pressure gasoline 36 cents to $2.40

### Gas Wells Drilled in Lake Erie

In the effort to develop additional gas reserves, two organizations are drilling in the bed of Lake Erie offshore from the old Romney-Tilbury East gas area. Dominion Natural Gas Co. recently completed its first test around 1,250 ft. with 350,000 cu. ft. daily; and is drilling below 550 ft. on a second test. Wood & Prior of Detroit, Mich., who drilled their first test last fall, are starting No. 2 opposite the Rachel Dawson farm, with Stover & Rawlings handling the contract. Piles are driven and cribs constructed about 800 ft. from shore, on which the drilling rigs are set up. Recently two drillers, Ralph Stubble and Roy Bagnell, were cut off by a storm and marooned on a drilling crib for 28 hours.

### Turner Valley Lime Tests

North Turner Valley: Miracle Royalties 1, LSD 3, 4-21-3w5, below 7,786 ft., Madison 7,524 ft.

Home Oil 7, LSD 14, 33-20-3w5, total depth 8,630 ft., Madison 8,088 ft., initial production after acidizing 1,454 bbl. daily.

West Central section: British American-Brown 2, LSD 2, 24-19-3w5, total depth 8,395 ft., Madison 7,936 ft., temporary allowable 232 bbl. daily.

### LEGAL

July 28, 1941.

Call for bids. To purchase royalty oil accruing to the United States from the Lance Creek oil field, Wyoming. Sealed proposals, in duplicate, will be received in the office of the Secretary of the Interior, Washington, D. C., on or before noon August 20, 1941, from responsible bidders for the purchase for a term of one, three, or five years, beginning April 1, 1944, of certain royalty oil accruing to the United States from Federal lands in the Lance Creek oil field, Wyoming. Specifications containing detailed information on quantities offered for sale, form of bids, bond requirements, deliveries, volume measurements, minimum acceptable price, gravity determinations, and action on bids, should be obtained by prospective bidders from the Director, Geological Survey, Department of the Interior, Washington, D. C., or the Supervisor, Geological Survey, Casper, Wyoming. Sealed bids are to be submitted to the Secretary, Department of the Interior, Washington, D. C., pursuant to the specifications, the envelope to be marked plainly "Bid on Lance Creek royalty oil. Not to be opened before noon, August 20, 1941." No bid received after the time fixed herein for submitting bids will be considered. Oscar L. Chapman, Assistant Secretary of the Interior.

# CRUDE-OIL PRICES . . .

## OKLAHOMA AND KANSAS GRAVITY TABLES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Below 21 | | | | | $.85 | $.75 | .... | $.70 |
| 21-21.9 | | | | | .87 | .78 | .... | .73 |
| 22-22.9 | | | | | .89 | .81 | .... | .76 |
| 23-23.9 | | | | | .91 | .84 | .... | .79 |
| 24-24.9 | | | | | .93 | .87 | .... | .82 |
| Below 25 | $.93 | .... | .... | $.86 | .... | .... | .... | .... |
| 25-25.9 | .95 | .95 | .... | .88 | .95 | .90 | .... | .85 |
| 26-26.9 | .97 | .97 | .... | .90 | .97 | .93 | .... | .88 |
| 27-27.9 | .99 | .99 | .... | .92 | .99 | .96 | .... | .91 |
| 28-28.9 | 1.01 | 1.01 | 1.01 | .94 | 1.01 | .99 | .... | .94 |
| 29-29.9 | 1.03 | 1.03 | 1.03 | .96 | 1.03 | 1.02 | .... | .97 |
| 30-30.9 | 1.05 | 1.05 | 1.05 | .98 | 1.05 | 1.05 | $1.05 | 1.00 |
| 31-31.9 | 1.07 | 1.07 | 1.07 | 1.00 | 1.07 | 1.07 | 1.07 | 1.02 |
| 32-32.9 | 1.09 | 1.09 | 1.09 | 1.02 | 1.09 | 1.09 | 1.09 | 1.04 |
| 33-33.9 | 1.11 | 1.11 | 1.11 | 1.04 | 1.11 | 1.11 | 1.11 | 1.06 |
| 34-34.9 | 1.13 | 1.13 | 1.13 | 1.06 | 1.13 | 1.13 | 1.13 | 1.08 |
| 35-35.9 | 1.15 | 1.15 | 1.15 | 1.08 | 1.15 | 1.15 | 1.15 | 1.10 |
| 36-36.9 | 1.17 | 1.17 | 1.17 | 1.10 | 1.17 | 1.17 | 1.17 | 1.12 |
| 37-37.9 | 1.19 | 1.19 | 1.19 | 1.12 | 1.19 | 1.19 | 1.19 | 1.14 |
| 38-38.9 | 1.21 | 1.21 | 1.21 | 1.14 | 1.21 | 1.21 | 1.21 | 1.16 |
| 39-39.9 | 1.23 | 1.23 | 1.23 | 1.16 | 1.23 | 1.23 | 1.23 | 1.18 |
| 40 and above | 1.25 | 1.25 | 1.25 | 1.18 | 1.25 | 1.25 | 1.25 | 1.20 |

## OKLAHOMA AND KANSAS TABLE EXPLANATION

COLUMN (1) MID-CONTINENT GRADES:
*Pure Oil Co.*, 5-20-41.
*Gulf Oil Corp.*, 5-20-41.
*Skelly Oil Co.* (Kansas only), 5-19-41.
*H. F. Wilcox Oil & Gas Co.*, 5-20-41.
COLUMN (2) MID-CONTINENT GRADES:
*White Eagle Oil Purchasing Co., Inc.*, 5-19-41, Kansas only.
*Sinclair Prairie Oil Marketing Co.*, 5-20-41.
COLUMN (3) MID-CONTINENT GRADES:
*Continental Oil Co.*, 5-19-41.
*Phillips Petroleum Co.*, 5-19-41.
*Tide Water Associated Oil Co.*, 5-20-41.
COLUMN (4) JACKSON, TILLMAN COUNTIES:
*Gulf Oil Corp.*, 5-20-41.
COLUMN (5) MID-CONTINENT GRADES:
*Standard Oil Co., (Indiana)*, 5-20-41.
*National Refining Co.*, 5-20-41.
COLUMN (6) MID-CONTINENT GRADES:
*Magnolia Petroleum Co.*, 5-21-41.
*Shell Oil Co., Inc.*, 5-19-41.
COLUMN (7) OKLAHOMA:
*Champlin Refining Co.*, 5-20-41.
COLUMN (8) CARTER COUNTY, OKLAHOMA including Healdton, Oscar, Spring and Seay.
*Shell Oil Co., Inc.*, 5-19-41.
*Ben Franklin Refining Co.*, 5-20-41.

### OKLAHOMA FLAT PRICE

| | |
|---|---|
| Cumberland | $1.12 |
| *Pure Oil Co.*, 5-20-41. | |

### MIDDLE WEST FLAT PRICES

#### Illinois and Indiana

| | |
|---|---|
| *Ohio Oil Co.:* | |
| Illinois basin, 5-21-41 | $1.37 |
| Eastern Illinois, 5-21-41 | 1.22 |
| Western Indiana, 5-21-41 | 1.22 |
| *Gulf Refining Co.:* | |
| Illinois basin, 5-21-41 | $1.37 |
| *Magnolia Petroleum Co.:* | |
| Illinois basin, 5-21-41 | $1.37 |
| *Carter Oil Co.:* | |
| Illinois (Louden), 5-21-41 | $1.37 |
| *Sohio Corp.:* | |
| Illinois basin, 5-21-41 | $1.37 |
| *Texas Co.:* | |
| Illinois basin, 5-21-41 | $1.37 |

#### Michigan

| | |
|---|---|
| *Simrall Corp.*, 5-27-41: | |
| Greendale, Porter, Vernon, Crystal, and Wise | $1.44 |
| Buckeye, Bentley, Edenville, Beaverton, and Monitor (sweet) | 1.42 |
| Freeman, Redding, Lincoln, and Winterfield | 1.39 |
| Hamilton-Grout | 1.29 |
| West Branch-Arenac | 1.24 |
| *Sohio Corp.*, 5-1-41: | |
| Bloomingdale-Columbia | $1.38 |
| *Mid-West Refineries, Inc.*, 5-1-41: | |
| Kent County | $1.38 |
| *Pure Oil Co.*, 5-27-41: | |
| Sherman | $1.39 |
| Midland (Midland County) | $1.44 |

**Flat-price quotations for Kentucky, Montana, Colorado, Texas and Canadian fields, deleted from this issue because of space limitations, will be published in the issue of August 14.**

### EASTERN STATES

#### Pennsylvania and Ohio

| | |
|---|---|
| *South Penn Oil Co.:* | |
| National lines, 6-18-41 | $2.75 |
| Southwest Penn, 6-18-41 | 2.40 |
| Eureka lines, 6-18-41 | 2.34 |
| Corning grade, 5-27-41 | 1.31 |
| *Tide Water Associated Oil Co.:* | |
| Bradford, 6-18-41 | 2.75 |
| Allegany, N. Y., 6-18-41 | 2.75 |
| *Pennzoil Co.:* | |
| Group A, 6-18-41 | $2.68 |
| Group B, 6-18-41 | 2.67 |
| Group C, 6-18-41 | 2.66 |
| Group D, 6-18-41 | 2.65 |
| Group E, 6-18-41 | 2.63 |
| *Quaker State Oil Refining Corp.:* | |
| In Buckeye lines, 6-18-41 | $2.30 |
| In Eureka lines, 6-18-41 | 2.34 |

#### West Virginia

| | |
|---|---|
| *Pure Oil Co.:* | |
| Cabin and Kelly Creek, 6-18-41 | $2.34 |

## LOUISIANA AND SOUTHERN ARKANSAS GRAVITY TABLE

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Below 18 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | $.94 | .... | .... | .... | .... | .... |
| 18-18.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .96 | .... | .... | .... | .... | .... |
| 19-19.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .98 | .... | .... | .... | .... | .... |
| Below 20 | .... | .... | .... | .... | .... | .... | .... | $1.06 | .... | $.94 | $.99 | $.89 | .... | .... | $1.06 | .... | .... | .... |
| 20-20.9 | .... | .... | .... | .... | .... | .... | .... | 1.08 | .... | .96 | 1.01 | .91 | 1.00 | .... | 1.08 | .... | .... | .... |
| Below 21 | $.68 | .... | .... | $.90 | .... | .... | .... | .... | .... | .... | .... | .... | .... | $.90 | .... | .... | .... | .... |
| 21-21.9 | .70 | .... | .... | .92 | .... | .... | .... | 1.10 | .... | .98 | 1.03 | .93 | 1.02 | .92 | 1.10 | .... | .... | .... |
| 22-22.9 | .72 | .... | .... | .94 | .... | .... | .... | 1.12 | .... | 1.00 | 1.05 | .95 | 1.05 | .94 | 1.12 | .... | .... | .... |
| 23-23.9 | .74 | .... | .... | .96 | .... | .... | .... | 1.14 | .... | 1.02 | 1.07 | .97 | 1.08 | .96 | 1.14 | .... | .... | .... |
| 24-24.9 | .76 | .... | .... | .98 | .... | .... | .... | 1.16 | .... | 1.04 | 1.09 | .99 | 1.11 | .98 | 1.16 | .... | .... | .... |
| Below 25 | .... | $.86 | $.98 | .... | .... | $.88 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 25-25.9 | .78 | .88 | 1.00 | 1.00 | .... | .90 | .... | 1.18 | .... | 1.06 | 1.11 | 1.01 | 1.14 | 1.00 | 1.18 | .... | .... | .... |
| 26-26.9 | .80 | .90 | 1.02 | 1.02 | .... | .92 | .... | 1.20 | .... | 1.08 | 1.13 | 1.03 | 1.17 | 1.02 | 1.20 | .... | .... | .... |
| 27-27.9 | .82 | .92 | 1.04 | 1.04 | .... | .94 | .... | 1.22 | .... | 1.10 | 1.15 | 1.05 | 1.19 | 1.04 | 1.22 | .... | .... | .... |
| 28-28.9 | .84 | .94 | 1.06 | 1.06 | .... | .96 | .... | 1.24 | .... | 1.12 | 1.17 | 1.07 | 1.21 | 1.06 | .... | $1.14 | $1.06 | .... |
| 29-29.9 | .86 | .96 | 1.08 | 1.08 | .... | .98 | .... | 1.26 | .... | 1.14 | 1.19 | 1.09 | 1.23 | 1.08 | .... | 1.16 | 1.08 | .... |
| 30-30.9 | .88 | .98 | 1.10 | 1.10 | $1.26 | 1.00 | .... | 1.28 | .... | 1.16 | 1.21 | 1.11 | 1.25 | 1.10 | .... | 1.18 | 1.10 | $1.05 |
| 31-31.9 | .90 | 1.00 | 1.12 | 1.12 | 1.28 | 1.02 | .... | 1.30 | $1.07 | 1.18 | 1.23 | 1.13 | 1.27 | 1.12 | .... | 1.20 | 1.12 | 1.07 |
| 32-32.9 | .92 | 1.02 | 1.14 | 1.14 | 1.30 | 1.04 | .... | 1.32 | 1.09 | 1.20 | 1.25 | 1.15 | 1.29 | 1.14 | .... | 1.22 | 1.14 | 1.09 |
| 33-33.9 | .94 | 1.04 | 1.16 | 1.16 | 1.32 | 1.06 | .... | 1.34 | 1.11 | 1.22 | 1.27 | 1.17 | 1.31 | 1.16 | .... | 1.24 | 1.16 | 1.11 |
| 34-34.9 | .96 | 1.06 | 1.18 | 1.18 | 1.34 | 1.08 | .... | 1.36 | 1.13 | 1.24 | 1.29 | 1.19 | 1.33 | 1.18 | .... | 1.26 | 1.18 | 1.13 |
| 35-35.9 | .98 | 1.08 | 1.20 | 1.20 | 1.36 | 1.10 | .... | .... | 1.15 | .... | .... | .... | .... | 1.20 | .... | 1.28 | 1.20 | 1.15 |
| Below 36 | .... | .... | .... | .... | .... | .... | $1.07 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 36-36.9 | 1.00 | 1.10 | 1.22 | 1.22 | .... | 1.12 | 1.09 | .... | 1.17 | .... | .... | .... | .... | 1.22 | .... | 1.30 | 1.22 | 1.17 |
| 37-37.9 | 1.02 | 1.12 | 1.24 | 1.24 | .... | 1.14 | 1.11 | .... | 1.19 | .... | .... | .... | .... | .... | .... | .... | .... | 1.19 |
| 38-38.9 | 1.04 | 1.14 | 1.26 | 1.26 | .... | 1.16 | 1.13 | .... | 1.21 | .... | .... | .... | .... | .... | .... | .... | .... | 1.21 |
| 39-39.9 | 1.06 | 1.16 | 1.28 | 1.28 | .... | 1.18 | 1.15 | .... | 1.23 | .... | .... | .... | .... | .... | .... | .... | .... | 1.23 |
| 40 & above | 1.08 | 1.18 | 1.30 | 1.30 | .... | 1.20 | 1.17 | .... | 1.25 | .... | .... | .... | .... | .... | .... | .... | .... | 1.25 |

## LOUISIANA AND SOUTHERN ARKANSAS TABLE EXPLANATION

*Standard Oil Co. of Louisiana*, 5-22-41.
COLUMN (1) applies to Atlanta, Buckner, Magnolia, Schuler (Jones sand), Village and Lewisville fields.
COLUMN (2) applies to Caddo, De Soto, Sabine, Fouke, Homer, Miller County, Sugar Creek and Nebo.
COLUMN (3) applies to Bunkie, Eola, Olla and South Olla.
COLUMN (4) applies to Bayou Mallet, Choctaw, Darrow, Jeanerette, Lirette, North Crowley, South Crowley, Port Barre, Potash, Roanoke, St. Martinville and Port Allen.
COLUMN (5) applies to University (Baton Rouge).
COLUMN (6) applies to Cotton Valley crude, Rodessa and Shreveport (Cross Lake); also Anse La Butte, effective 8-1-41, starting at 80 cents for below 21°.
*Continental Oil Co.*, 5-21-41.
COLUMN (7) applies to Abbeville, Louisiana.
*Continental Oil Co.*, 5-21-41.
*Stanolind Oil & Gas Co.*, 5-21-41.
COLUMN (8) applies to East and West Hackberry.
COLUMN (2) applies to Caddo Parish.
COLUMN (9) applies to Evangeline, Acadia Parish.
*Lion Oil Refining Co.*, 5-22-41.
COLUMN (1) applies to Reynolds lime, Jones sand, Schuler, Ark.
COLUMN (2) applies to El Dorado, West and South Rainbow fields, Snow Hill and Schuler-Morgan sand.
*Placid Oil Co.*, 5-22-41.
COLUMN (3) applies to Olla.
COLUMN (2) applies to Nebo field.
*Shell Oil Co., Inc.*, 5-20-41.
COLUMN (10) applies to Roanoke, Chalkley.
COLUMN (11) applies to Iowa, Black Bayou, White Castle.
COLUMN (12) applies to Gibson, South Houma, Hester, West Lake Verret.
*Magnolia Petroleum Co.*, 5-21-41.
COLUMN (13) applies to Lockport, Cameron Meadows, and West Gueydan, La.
COLUMN (6) applies to Haynesville, Cotton Valley, Rodessa, La., and Miller County, Arkansas.
*Phillips Petroleum Co.*, 3-29-41.
COLUMN (1), Schuler (Jones sand), except schedule starts at 76 cents for below 25° gravity.
*Gulf Refining Co.*, 5-21-41.
COLUMN (9), Jennings.
COLUMN (8), Edgerly, Starks, Vinton, East Hackberry, Cameron Meadows, Leesville, Timbalier Bay, Grand Bay Quarantine Bay, and West Bay.
COLUMN (6) applies to Caddo, Homer, Bull Bayou, Crichton, De Soto, Haynesville and El Dorado.
*Pure Oil Co.* 4-22-41.
COLUMN (14) applies to Gueydan crude.
COLUMN (6), Caddo, Homer, Haynesville, Bull Bayou, Crichton, De Soto, and El Dorado.
*Texas Co.*, 5-21-41.
COLUMN (6) applies to North Louisiana.
COLUMNS (15) and (16), Bay St. Elaine, Caillou Island, Iberia, Lake Barre, Lake Pelto, Leesville, Port Barre. (Schedules A and B).
COLUMN (17), Bateman Lake, Dog Lake, Fausse Point, Horseshoe Bayou, Jefferson Island, Plumb Bob, Vermilion Bay, West Cote Blanche and Delta Duck Club.
COLUMN (18), Delta Farm, Lake Salvador, Golden Meadow.

### LOUISIANA AND ARKANSAS FLAT PRICES

| | |
|---|---|
| *Continental Oil Co.*, 5-21-41: | |
| Tepetate and Lake Arthur | $1.18 |
| Ville Platte | 1.20 |
| *Gulf Refining Co.*, 5-21-41: | |
| Smackover (Ark.) | $0.83 |
| *Lion Oil Refining Co.*, 5-22-41: | |
| Smackover (heavy) | $0.83 |
| Dorcheat | 1.15 |
| *Phillips Petroleum Co.*, 5-22-41: | |
| Smackover (heavy) | $0.83 |
| *Placid Oil Co.*, 5-22-41: | |
| Tullos-Urania (5-21-41) | $1.15 |
| Cotton Valley dist. (above 60°) | 1.30 |
| Cotton Valley (Holloway sand) | 1.25 |
| Cotton Valley (Bodcaw-D sands) | 1.20 |
| *Pure Oil Co.:* | |
| Bosco (5-21-41) | $1.14 |
| Sweet Lake (5-22-41) | 1.06 |
| Creole (5-22-41) | 1.16 |
| *Republic Oil Co.*, 6-2-41: | |
| Nevada County, Arkansas | $0.80 |
| *Shell Oil Co., Inc.*, 5-20-41: | |
| Happytown | $1.15 |
| *Standard Oil Co. of Louisiana*, 5-22-41: | |
| Big Creek, Dorcheat, McKamie (sour) | $1.15 |
| Smackover (heavy) | .83 |
| Cotton Valley distillate | 1.30 |
| Cotton Valley (Holloway sand) | 1.25 |
| Lisbon distillate | 1.20 |
| *Republic Oil Refining Co.*, 5-21-41: | |
| Bayou Pigeon | $1.20 |
| *Texas Co.*, 5-21-41: | |
| Erath | $1.21 |
| Garden Island | 1.36 |
| Lafitte, Paradis | 1.19 |
| Lake Mongoulois | 1.36 |

### ROCKY MOUNTAIN GRAVITY TABLE

| | |
|---|---|
| Below 29 | $0.96 |
| 29-29.9 | .98 |
| 30-30.9 | 1.00 |
| 31-31.9 | 1.02 |
| 32-32.9 | 1.04 |
| 33-33.9 | 1.06 |
| 34-34.9 | 1.08 |
| 35-35.9 | 1.10 |
| 36-36.9 | 1.12 |
| 37-37.9 | 1.14 |
| 38-38.9 | 1.16 |
| 39-39.9 | 1.18 |
| 40 and above | 1.20 |

*Stanolind Oil & Gas Co.*, 5-20-41, includes Dutton Creek, Midway and Salt Creek except Tensleep crude, Wyoming.
*Sinclair Wyoming Oil Co.*, 5-20-41, includes Salt Creek and Lost Soldier, except Tensleep crude, Wyoming.
*Continental Oil Co.*, 5-21-41, includes Fort Collins and Wellington, Colorado.

#### Wyoming

| | |
|---|---|
| *Ohio Oil Co.:* | |
| Rock River (5-20-41) | $1.15 |
| Lance Creek (7-1-41) | 1.12 |
| Elk Basin and Grass Creek (light) | 1.00 |
| *Stanolind Oil & Gas Co.*, 5-20-41: | |
| Frannie (light) | .70 |
| Frannie (heavy) | .47 |
| Grass Creek (light) | 1.00 |
| Grass Creek (heavy) | .50 |
| Hamilton Dome | .45 |
| Elk Basin | 1.00 |
| Salt Creek (Tensleep) | .6785 |
| *Continental Oil Co.:* | |
| Big Muddy (5-30-41) | $1.08 |
| Lance Creek (9-1-41) | 1.12 |

### TEXAS GULF COAST GRAVITY TABLES

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Below 20 | $1.06 | $1.06 | .... | $.98 | $.93 |
| 20-20.9 | 1.08 | 1.08 | .... | 1.00 | .95 |
| Below 21 | .... | .... | $1.08 | .... | .... |
| 21-21.9 | 1.10 | 1.10 | 1.10 | 1.02 | .97 |
| 22-22.9 | 1.12 | 1.12 | 1.12 | 1.04 | .99 |
| 23-23.9 | 1.14 | 1.14 | 1.14 | 1.06 | 1.01 |
| 24-24.9 | 1.16 | 1.16 | 1.16 | 1.08 | 1.03 |
| 25-25.9 | 1.18 | 1.18 | 1.18 | 1.10 | 1.05 |
| 26-26.9 | 1.20 | 1.20 | 1.20 | 1.12 | 1.07 |
| 27-27.9 | 1.22 | 1.22 | 1.22 | 1.14 | 1.09 |
| 28-28.9 | 1.24 | 1.24 | 1.24 | 1.16 | 1.11 |
| 29-29.9 | 1.26 | 1.26 | 1.26 | 1.18 | 1.13 |
| 30-30.9 | 1.28 | 1.28 | 1.28 | 1.20 | 1.15 |
| 31-31.9 | 1.30 | 1.30 | 1.30 | 1.22 | 1.17 |
| 32-32.9 | 1.32 | 1.32 | 1.32 | 1.24 | 1.19 |
| 33-33.9 | 1.34 | 1.34 | 1.34 | 1.26 | 1.21 |
| 34-34.9 | 1.36 | 1.36 | 1.36 | 1.28 | 1.23 |
| 35-35.9 | 1.38 | .... | 1.38 | 1.30 | 1.25 |
| 36-36.9 | 1.40 | .... | 1.40 | 1.32 | 1.27 |
| 37-37.9 | 1.42 | .... | 1.42 | 1.34 | 1.29 |
| 38-38.9 | 1.44 | .... | 1.44 | 1.36 | 1.31 |
| 39-39.9 | 1.46 | .... | 1.46 | 1.38 | 1.33 |
| 40 and above | 1.48 | .... | 1.48 | 1.40 | 1.35 |

### TEXAS GULF COAST GRAVITY TABLE EXPLANATION

COLUMN (1):
*Humble Oil & Refining Co.*, 5-21-41, includes Amelia, Clear Lake, Goose Creek, Hastings, Magnet, Mykawa (new), Raccoon Bend, South Thompsons, Sugarland, Thompsons, and Webster fields.
*Stanolind Oil & Gas Co.*, 5-21-41, includes West Beaumont, High Island and Spindletop.
*Sinclair Prairie Oil Marketing Co.*, 5-21-41.
*Stanolind Oil Purchasing Co.*, 4-1-41, includes Clinton where schedule starts at 98 cents for below 21°, regular thereafter.
*Pure Oil Co., 4-21-41*, includes Louise and Ganado.
*Gulf Refining Co.*, 5-21-41, includes Spindletop, Sour Lake, Lovells Lake, West Beaumont, Goose Creek, South Liberty, Big Creek, Blue Ridge, Fannett, Moore, Barbers Hill, Hankamer, Thompson, Lochridge, Dyersdale, and Hull (old).
*Sun Oil Co.*, 5-21-41, includes Barbers Hill, Batson (old), Bayou Blue, Chacahoula, Cotton Lake, Esperson (below 35° gravity), Fausse Pointe, Goose Creek, Greens Lake, Hackberry (east and west), Hull (below 25°), Humble (below 35°), Nome, North Dayton (below 25°), Orange, Saratoga, Sour Lake, South Liberty and Vinton.
COLUMN (2):
*Texas Co.*, 5-21-41, includes Arriola, Ganado, Hamman, Hillje, Humble, Kubela, Magnet, Manvel, Markham, Mauritz, Old Ocean, Pickett Ridge, Port Neches, Sour Lake, West Columbia, and Withers.

COLUMN (3):
*Pan American Production Co.*, 5-21-41, includes Hastings and South Houston.
*Stanolind Oil & Gas Co.*, 4-1-41, includes High Island, Spindletop, Hastings, and South Houston.
COLUMN (4):
*Humble Oil & Refining Co.*, 5-21-41, includes Anahuac, Angleton, Cedar Point, Fishers' Reef, Hull (new and old), Pierce Junction, Red Fish Reef, and Turtle Bay.
*Gulf Refining Co.*, 5-21-41, includes Anahuac, Hull (new), Thompson (deep), Pierce Junction, and Orange.
*Sun Oil Co.*, 5-21-41, includes Anahuac, Caplen and Turtle Bay.
*Humble Oil & Refining Co.*, 3-29-41, includes Dickinson, Gillock, Hardin, League City, and Rowan.
*Stanolind Oil & Gas Co.*, 5-21-41, includes Fairbanks, North Houston, and Rosyln.
COLUMN (5):
*Pan American Production Co.*, 5-21-41, includes Gillock, except scale starts at 95 cents below 21°.

## SOUTH TEXAS AND SOUTHWEST TEXAS GRAVITY TABLES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Below 20 | $1.03 | $1.08 | $1.08 | $.89 | $1.03 | $1.03 | $1.08 |
| 20-20.9 | 1.05 | 1.10 | 1.10 | .90 | 1.05 | 1.05 | 1.10 |
| 21-21.9 | 1.07 | 1.12 | 1.12 | .91 | 1.07 | 1.07 | 1.12 |
| 22-22.9 | 1.09 | 1.14 | 1.14 | .92 | 1.09 | 1.09 | 1.14 |
| 23-23.9 | 1.11 | 1.16 | 1.16 | .93 | 1.11 | 1.11 | 1.16 |
| 24-24.9 | 1.13 | 1.18 | 1.18 | .94 | 1.13 | 1.13 | 1.18 |
| 25-25.9 | 1.15 | 1.20 | 1.20 | .95 | 1.15 | 1.15 | 1.20 |
| 26-26.9 | 1.17 | 1.22 | 1.22 | .96 | 1.17 | 1.17 | 1.22 |
| 27-27.9 | 1.19 | 1.24 | 1.24 | .97 | .... | 1.19 | 1.24 |
| 28-28.9 | 1.21 | 1.26 | 1.26 | .98 | .... | 1.21 | 1.26 |
| 29-29.9 | 1.23 | 1.28 | .... | .99 | .... | .... | 1.28 |
| 30-30.9 | 1.25 | 1.30 | .... | 1.00 | .... | .... | 1.30 |
| 31-31.9 | 1.27 | 1.32 | .... | 1.01 | .... | .... | 1.32 |
| 32-32.9 | 1.29 | 1.34 | .... | 1.02 | .... | .... | 1.34 |
| 33-33.9 | 1.31 | 1.36 | .... | 1.03 | .... | .... | 1.36 |
| 34-34.9 | 1.33 | 1.38 | .... | 1.04 | .... | .... | 1.38 |
| 35-35.9 | 1.35 | 1.40 | .... | 1.05 | .... | .... | 1.40 |
| 36-36.9 | 1.37 | 1.42 | .... | 1.06 | .... | .... | .... |
| 37-37.9 | 1.39 | 1.44 | .... | 1.07 | .... | .... | .... |
| 38-38.9 | 1.41 | 1.46 | .... | 1.08 | .... | .... | .... |
| 39-39.9 | 1.43 | 1.48 | .... | 1.09 | .... | .... | .... |
| 40 and above | 1.45 | 1.50 | .... | 1.10 | .... | .... | .... |

## SOUTH AND SOUTHWEST TEXAS TABLE EXPLANATION

COLUMN (1) MIRANDO:
*Humble Oil & Refining Co.*, 5-21-41, includes Blanchard, Bridwell, Colorado, Comitas, Eagle Hill, Escobas, Fitzsimmons, Glen, Government Wells (North and South), Heyser, Hoffman, Kelsey, Kohler, Loma Novia, Lundell, Manila, Mirando Valley, Placedo, Randado, Sarnosa, and Tesoro.
*Magnolia Petroleum Co.*, 5-21-41.
*Continental Oil Co.*, 7-1-41. Includes Hoffman, Government Wells (North and South), Lopez, Moco, Colmena, Seven Sisters, South Seven Sisters, Loma Novia, Conoco Driscoll, O'Hern, Piedre Lumbre, and Taranchauas.
*Amsco Pipe Line Co.*, 5-21-41, includes Adami and Munson.
*Republic Oil Refining Co.*, 5-21-41, includes Heyser field crude.
COLUMN (2) REFUGIO:
*Continental Oil Co.*, 7-1-41, includes Minnie Bock, Clara Driscoll, South Clara Driscoll, Driscoll Ranch, Orange Grove, and Wade City.
*Humble Oil & Refining Co.*, 5-21-41, includes East White Point, Greta, Melon Creek, O'Connor-McFaddin, Plymouth, Saxet, Taft, and Tom O'Connor.
*Amsco Pipe Line Co.*, 5-21-41, includes Plymouth, Taft, and East White Point.
COLUMN (3) REFUGIO:
*Texas Co.*, 5-21-41, includes Greta, Saxet, and Taft.
COLUMN (4) LA ROSA:
*Amsco Pipe Line Co.*, 3-29-41.
COLUMN (5) DUVAL-MIRANDO:
*Sun Oil Co.*, 5-21-41.
COLUMN (6) DUVAL-MIRANDO:
*Texas Co.*, 5-21-41.
COLUMN (7) NUECES COUNTY:
*Amsco Pipe Line Co.*, 5-21-41.
*Republic Oil Refining Co.*, 5-21-41.

## WEST TEXAS, PANHANDLE AND NEW MEXICO TABLE EXPLANATION

COLUMN (1):
*Humble Oil & Refining Co.*, 5-21-41, includes Andrews, Crane, Crockett, Ector, Gaines, Glasscock, Howard, Reagan, Upton, Winkler, and Yoakum counties, West Texas, and Lea County, New Mexico.
*Gulf Refining Co.*, 5-21-41, includes Crane, Ector, Upton, Ward, and Winkler counties, West Texas.
COLUMN (2):
*Sinclair Prairie Oil Marketing Co.*, 5-21-41, includes West Texas and Lea County, New Mexico. Effective 5-29-41 in Eddy County, New Mexico.
*Magnolia Petroleum Co.*, 5-21-41, includes Upton, Howard, Glasscock, Mitchell, Winkler, Cochran, Hockley, Yoakum and Gaines counties.
COLUMN (3):
*Texas Co.*, 5-21-41, includes Crane and Winkler counties, Texas, and Lea County, New Mexico.
COLUMN (4) TEXAS PANHANDLE:
*Magnolia Petroleum Co.*, 7-9-41.
*Continental Oil Co.*, 7-9-41.
*Phillips Petroleum Co.*, 7-9-41.
COLUMN (5) WINKLER AND LEA:
*Stanolind Oil & Gas Co.*, 5-21-41, includes Winkler County only.
*Gulf Refining Co.*, 5-21-41, includes Lea County, New Mexico, only.
COLUMN (6) GRAY COUNTY:
*Texas Co.*, 5-21-41.
*H. F. Wilcox Oil & Gas Co.* (7-9-41).
COLUMN (7) LEA COUNTY:
*Magnolia Petroleum Co.*, 5-21-41.
COLUMN (8) EDDY COUNTY:
*Continental Oil Co.*, 5-30-41.
COLUMN (9):
*Shell Oil Co., Inc.*, 5-20-41, includes Crane, Ector, Howard, Glasscock, Upton, Winkler, and Yoakum counties, Texas, and Lea County, New Mexico.
COLUMN (10) TEXAS PANHANDLE:
*Humble Oil & Refining Co.*, 7-9-41.
COLUMN (11) PANHANDLE:
*Sinclair Prairie Oil Marketing Co.*, 5-23-41.

## WEST TEXAS, PANHANDLE, AND NEW MEXICO GRAVITY TABLES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Below 20 | $0.70 | .... | .... | .... | .... | .... | .... | .... | $0.70 | $.73 | .... |
| 20-20.9 | .72 | .... | .... | .... | .... | .... | .... | .... | .72 | .75 | .... |
| 21-21.9 | .74 | .... | .... | .... | .... | .... | .... | .... | .74 | .77 | .... |
| 22-22.9 | .76 | .... | .... | .... | .... | .... | .... | .... | .76 | .79 | .... |
| 23-23.9 | .78 | .... | $0.78 | .... | .... | .... | .... | .... | .78 | .81 | .... |
| 24-24.9 | .80 | .... | .80 | .... | .... | .... | .... | .... | .80 | .83 | .... |
| Below 25 | .... | $0.80 | .... | .... | .... | .... | $0.80 | .... | .... | .... | $0.83 |
| 25-25.9 | .82 | .82 | .82 | .... | $0.82 | .... | .82 | .... | .82 | .85 | .85 |
| 26-26.9 | .84 | .84 | .84 | .... | .84 | .... | .84 | .... | .84 | .87 | .87 |
| 27-27.7 | .86 | .86 | .86 | .... | .86 | .... | .86 | .... | .86 | .89 | .89 |
| 28-28.9 | .88 | .88 | .88 | $0.91 | .88 | .... | .88 | $0.88 | .88 | .91 | .91 |
| 29-29.9 | .90 | .90 | .90 | .93 | .90 | .... | .90 | .90 | .90 | .93 | .93 |
| 30-30.9 | .92 | .92 | .92 | .95 | .92 | .... | .92 | .92 | .92 | .95 | .95 |
| 31-31.9 | .94 | .94 | .94 | .97 | .94 | .... | .94 | .94 | .94 | .97 | .97 |
| 32-32.9 | .96 | .96 | .96 | .99 | .96 | .... | .96 | .96 | .96 | .99 | .99 |
| 33-33.9 | .98 | .98 | .98 | 1.01 | .98 | .... | .98 | .98 | .98 | 1.01 | 1.01 |
| 34-34.9 | 1.00 | 1.00 | 1.00 | 1.03 | 1.00 | $1.03 | 1.00 | 1.00 | 1.00 | 1.03 | 1.03 |
| 35-35.9 | 1.02 | 1.02 | 1.02 | 1.05 | 1.02 | 1.05 | 1.02 | 1.02 | 1.02 | 1.05 | 1.05 |
| 36-36.9 | 1.04 | 1.04 | 1.04 | 1.07 | 1.04 | 1.07 | 1.04 | 1.04 | 1.04 | 1.07 | 1.07 |
| 37-37.9 | 1.06 | 1.06 | .... | 1.09 | 1.06 | 1.09 | .... | 1.06 | .... | 1.09 | 1.09 |
| 38-38.9 | 1.08 | 1.08 | .... | 1.11 | 1.08 | 1.11 | .... | 1.08 | .... | 1.11 | 1.11 |
| 39-39.9 | 1.10 | 1.10 | .... | 1.13 | 1.10 | 1.13 | .... | 1.10 | .... | 1.13 | 1.13 |
| 40 and above | 1.12 | 1.12 | .... | 1.15 | 1.12 | 1.15 | .... | 1.12 | .... | 1.15 | 1.15 |

## NORTH TEXAS, WEST CENTRAL TEXAS, EAST CENTRAL TEXAS GRAVITY TABLES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Below 20 | .... | .... | .... | .... | $.80 | .... | .... | .... |
| 20-20.9 | .... | .... | .... | .... | .82 | .... | .... | .... |
| Below 21 | .... | .... | .... | .... | .... | $.68 | .... | .... |
| 21-21.9 | .... | .... | .... | .... | .84 | .70 | .... | .... |
| 22-22.9 | .... | .... | .... | .... | .86 | .72 | .... | .... |
| 23-23.9 | .... | .... | .... | .... | .88 | .74 | .... | .... |
| 24-24.9 | .... | .... | .... | .... | .90 | .76 | .... | .... |
| Below 25 | .... | .... | $.88 | .... | .... | .... | $0.86 | $0.95 |
| 25-25.9 | $.88 | .... | .90 | $.97 | .92 | .78 | .88 | .97 |
| 26-26.9 | .90 | .... | .92 | .99 | .... | .80 | .90 | .99 |
| 27-27.9 | .92 | .... | .94 | 1.01 | .... | .82 | .92 | 1.01 |
| 28-28.9 | .94 | $.94 | .96 | 1.03 | .... | .84 | .94 | 1.03 |
| 29-29.9 | .96 | .96 | .98 | 1.05 | .... | .86 | .96 | 1.05 |
| 30-30.9 | .98 | .98 | 1.00 | 1.07 | .... | .88 | .98 | 1.07 |
| 31-31.9 | 1.00 | 1.00 | 1.02 | 1.09 | .... | .90 | 1.00 | 1.09 |
| 32-32.9 | 1.02 | 1.02 | 1.04 | 1.11 | .... | .92 | 1.02 | 1.11 |
| 33-33.9 | 1.04 | 1.04 | 1.06 | 1.13 | .... | .94 | 1.04 | 1.13 |
| 34-34.9 | 1.06 | 1.06 | 1.08 | 1.15 | .... | .96 | 1.06 | 1.15 |
| 35-35.9 | 1.08 | 1.08 | 1.10 | 1.17 | .... | .98 | 1.08 | 1.17 |
| 36-36.9 | 1.10 | 1.10 | 1.12 | 1.19 | .... | 1.00 | 1.10 | 1.19 |
| 37-37.9 | 1.12 | 1.12 | 1.14 | 1.21 | .... | 1.02 | 1.12 | 1.21 |
| 38-38.9 | 1.14 | 1.14 | 1.16 | 1.23 | .... | 1.04 | 1.14 | 1.23 |
| 39-39.9 | 1.16 | 1.16 | 1.18 | 1.25 | .... | 1.06 | 1.16 | 1.25 |
| 40 and above | 1.18 | 1.18 | 1.20 | 1.27 | .... | 1.08 | 1.18 | 1.27 |

## NORTH TEXAS, WEST CENTRAL TEXAS, EAST CENTRAL TEXAS TABLE EXPLANATION

COLUMN (1) WEST CENTRAL AND NORTH:
*Humble Oil & Refining Co.*, 5-21-41, includes Brown, Callahan, Comanche, Eastland, Fisher, Haskell, Jones, Shackelford, Stephens, and Throckmorton counties.
*Panhandle Refining Co.*, 5-21-41, in Leuders area.
*Gulf Refining Co.*, 5-21-41.
COLUMN (2) NORTH TEXAS:
*Continental Oil Co.*, 5-21-41.
*Magnolia Petroleum Co.*, 5-21-41.
*Panhandle Refining Co.*, 5-21-41.
*Sinclair Prairie Oil Marketing Co.*, 5-21-41.
*Bell Oil & Gas Co.*, 5-21-41.
*Texas Co.*, 5-21-41.
COLUMN (3) EAST CENTRAL:
*Magnolia Petroleum Co.*, 5-21-41, includes Cass, Panola, and Rodessa (Texas and Louisiana), and Miller County, Arkansas.
*Gulf Refining Co.*, 5-21-41, includes Rodessa, Texas.
COLUMN (4) EAST CENTRAL:
*Humble Oil & Refining Co.*, 5-21-41, includes Anderson, Cherokee, Limestone, and Navarro counties and the Navarro Crossing field.
COLUMN (5) EAST CENTRAL:
*Humble Oil & Refining Co.*, 5-21-41, includes Hawkins field.
COLUMN (6) NORTH TEXAS:
*Stanolind Oil Purchasing Co.*, 5-21-41.
COLUMN (7) FISHER COUNTY:
*Shell Oil Co., Inc.*, 5-20-41.
COLUMN (8) MEXIA:
*Sinclair Prairie Oil Marketing Co.*, 5-30-41.

# STANDARD OIL CO. OF CALIFORNIA

## CRUDE-OIL PRICES EFFECTIVE MAY 23, 1941

(All gravities above those quoted take highest price offered in that field)

| Gravity | Signal Hill (Long Beach) | Wilmington | (El Segundo) | Seal Beach | Huntington Beach | Inglewood | Playa Del Rey | Olinda-Brea Canyon | Athens-Rosecrans | Torrance | Richfield | Whittier East Coyote (La Habra) | Montebello | West Coyote Hills | Santa Fe Springs | Greeley, Canal, Wasco | Coles Levee | Mountain View | Elk Hills, Buena Vista Hills, Midway-Sunset, Lakeview area | Lost Hills | Coalinga | Wheeler Ridge | Kettleman Hills | Elwood Terrace |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14-14.9 | .... | $.68 | .... | .... | $.71 | .... | .... | $.70 | .... | $.70 | $.70 | $.70 | $.72 | .... | .... | .... | .... | .... | $.73 | $.73 | $.73 | .... | .... | .... |
| 15-15.9 | .... | .71 | .... | .... | .75 | $.76 | .... | .72 | .... | .72 | .71 | .72 | .72 | .... | .... | .... | .... | .... | .73 | .73 | .73 | .... | .... | .... |
| 16-16.9 | .... | .74 | $.79 | .... | .79 | .79 | .... | .75 | .... | .74 | .73 | .75 | .72 | .... | .... | .... | .... | .... | .73 | .75 | .73 | .... | .... | .... |
| 17-17.9 | .... | .78 | .82 | .... | .82 | .82 | .... | .78 | .... | .77 | .76 | .78 | .72 | .... | .... | .... | .... | .... | .75 | .78 | .73 | .... | .... | .... |
| 18-18.9 | $.80 | .82 | .86 | .... | .86 | .85 | .... | .81 | .... | .80 | .79 | .82 | .74 | .... | .... | .... | .... | .... | .78 | .81 | .73 | .... | .... | .... |
| 19-19.9 | .84 | .86 | .90 | .... | .89 | .88 | .... | .85 | .... | .83 | .82 | .85 | .77 | .... | .... | .... | .... | $.73 | .81 | .84 | .75 | .... | .... | .... |
| 20-20.9 | .88 | .90 | .94 | .... | .93 | .92 | $.80 | .88 | .... | .86 | .85 | .89 | .80 | .... | .... | .... | .... | .76 | .85 | .87 | .77 | .... | .... | .... |
| 21-21.9 | .92 | .94 | .98 | .... | .96 | .95 | .84 | .91 | .... | .89 | .89 | .92 | .84 | .... | .... | .... | .... | .79 | .90 | .90 | .80 | .... | .... | .... |
| 22-22.9 | .96 | .98 | 1.02 | $.88 | .99 | .98 | .87 | .95 | .... | .93 | .93 | .96 | .87 | .... | .... | .... | .... | .83 | .94 | .93 | .83 | $.76 | .... | .... |
| 23-23.9 | 1.00 | 1.02 | 1.05 | .92 | 1.02 | 1.01 | .... | .98 | .... | .97 | .98 | 1.00 | .91 | .... | .... | .... | .... | .87 | .99 | .96 | .86 | .80 | .... | .... |
| 24-24.9 | 1.03 | 1.06 | 1.07 | .97 | 1.05 | 1.04 | f.o.b. | 1.01 | .... | 1.01 | 1.02 | 1.03 | .94 | $.99 | .... | .... | .... | .90 | 1.03 | .99 | .89 | .83 | .... | .... |
| 25-25.9 | 1.07 | 1.09 | 1.10 | 1.01 | 1.08 | 1.07 | our | 1.04 | .... | 1.05 | 1.06 | 1.07 | .98 | 1.02 | .... | .... | .... | .94 | 1.07 | 1.01 | .92 | .... | .... | .... |
| 26-26.9 | 1.11 | 1.12 | 1.12 | 1.06 | 1.11 | 1.10 | pipe | 1.08 | .... | 1.09 | 1.10 | 1.11 | 1.01 | 1.06 | .... | .... | .... | .97 | 1.11 | 1.04 | .95 | .... | .... | .... |
| 27-27.9 | 1.15 | 1.15 | 1.15 | 1.10 | 1.14 | 1.14 | line | 1.11 | .... | 1.13 | .... | 1.15 | 1.05 | 1.10 | $1.04 | .... | .... | 1.01 | 1.15 | 1.07 | .98 | .... | .... | .... |
| 28-28.9 | 1.18 | 1.18 | 1.18 | 1.15 | 1.17 | 1.17 | .... | 1.14 | .... | 1.17 | .... | .... | 1.08 | 1.13 | 1.08 | .... | .... | 1.04 | 1.19 | 1.10 | 1.00 | .... | .... | .... |
| 29-29.9 | 1.20 | 1.21 | .... | 1.19 | 1.20 | 1.20 | .... | .... | $1.17 | .... | .... | .... | 1.12 | 1.17 | 1.12 | .... | .... | 1.07 | 1.24 | 1.13 | 1.02 | .... | .... | .... |
| 30-30.9 | 1.23 | 1.24 | .... | .... | 1.23 | 1.22 | .... | .... | 1.21 | .... | .... | .... | 1.15 | 1.21 | 1.15 | $1.01 | $1.09 | 1.10 | 1.28 | 1.16 | 1.04 | .... | .... | f.o.b. |
| 31-31.9 | .... | .... | .... | .... | .... | 1.24 | .... | .... | 1.25 | .... | .... | .... | 1.19 | 1.24 | 1.19 | 1.04 | 1.12 | 1.14 | .... | .... | 1.06 | .... | .... | ship |
| 32-32.9 | .... | .... | .... | .... | .... | .... | .... | .... | 1.29 | .... | .... | .... | 1.23 | 1.28 | 1.23 | 1.07 | 1.14 | 1.17 | .... | .... | 1.09 | .... | .... | .... |
| 33-33.9 | .... | .... | .... | .... | .... | .... | .... | .... | 1.32 | .... | .... | .... | 1.27 | .... | 1.26 | 1.10 | 1.17 | .... | .... | .... | 1.11 | .... | .... | $1.22 |
| 34-34.9 | .... | .... | .... | .... | .... | .... | .... | .... | 1.36 | .... | .... | .... | 1.31 | .... | 1.30 | 1.13 | 1.20 | .... | .... | .... | 1.13 | .... | .... | 1.25 |
| 35-35.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.35 | .... | .... | 1.16 | 1.22 | .... | .... | .... | .... | .... | $1.23 | 1.28 |
| 36-36.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.39 | .... | .... | 1.19 | 1.25 | .... | .... | .... | .... | .... | 1.26 | .... |
| 37-37.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.43 | .... | .... | 1.22 | .... | .... | .... | .... | .... | .... | 1.29 | .... |
| 38-38.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.47 | .... | .... | 1.25 | .... | .... | .... | .... | .... | .... | .... | .... |
| 39-39.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.51 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 40-40.9 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 1.53 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |

Standard posts 73 cents for all grades at Newhall, Kern River, Kern Front, McKittrick and Round Mountain.

# Personal Paragraphs

HARRY G. PETERS, vice president of the Love Petroleum Co., Jackson, Miss., sustained critical head injuries in an automobile collision in Jackson last week.

ARTHUR V. BOURQUE, manager of the Tank-Car Service Committee, created to direct the movement of tank cars under the national-defense movement, has been in Tulsa preparing to move to Chicago to take over his new duties. G. E. EVERETT, one-time assistant secretary of the W.P.R.A., and later with the A.P.I., is to become assistant to Mr. Bourque in the tank-car office.

L. W. MEYER, Olson Drilling Co., has been transferred from Burrton, Kans., to Oklahoma City, Okla.

PAT MEHOLIN, formerly scout with Sells Petroleum, Inc., has joined Sinclair Prairie, and is stationed at Tyler, Tex.

ALEXANDER FRASER, president, Shell Oil Co., Inc., was in the Southwest last week touring company properties.

MYATT S. LIPSCOMBE, land man for Midstates Oil Co., Tulsa, is to be in charge of the company's new office at Wichita, Kans.

JOHN BIEGEL, apprentice engineer with Phillips Petroleum Co., has been transferred from Bartlesville, Okla., to Amarillo, Tex.

W. E. JOHNSON, geologist, Ohio Oil Co., at Falls City, Neb., has returned from California where he visited friends at Ohio's Los Angeles offices.

VINCENT WHITE, petroleum engineer for the Texas Railroad Commission, and formerly stationed at Midland, Tex., has been transferred to Pampa, Tex.

C. B. WRIGHTSMAN, president, Standard Oil Co. of Texas, has sold his string of polo ponies, reputed to be among the best in Texas, and has turned the proceeds over to USO.

J. L. MINAHAN, petroleum and mechanical engineer with Magnolia Petroleum Co. in the company's Southwest Texas district, stationed at Alice, Tex., has been appointed petroleum and geological engineer with the U.S.G.S., stationed at Washington, D. C.

GOV. SAM H. JONES of Louisiana and his executive counsel, G. T. OWEN, last week traveled to Washington to urge the OPM to study Louisiana's natural-gas reserves as a power source for electrical generation and aluminum manufacture.

WARREN E. HOAGLAND has been named associate attorney for the Standard Oil Co. of New Jersey. Mr. Hoagland had been a member of the law firm of Davis, Polk, Wardwell, Gardner & Reed, of New York City, headed by John W. Davis, 1924 Democratic candidate for president, and is a graduate of Harvard law school.

MARTIN LUKER, of Holliday, Tex., was general chairman of arrangements for the annual picnic of employes of Humble Oil & Refining Co. of the Vernon, Holliday and Avoca districts, on August 3. E. B. OWEN, J. R. ENLOE and R. M. MOORE assisted Mr. Luker.

O. C. NONWEILER, former division engineer with Carter Oil Co. in Shreveport, La., has been transferred to Tulsa and promoted to the position of chief engineer with Oklahoma Pipe Line Co., effective August 1. He is succeeded in the southern division by M. A. WRIGHT, who moves to Shreveport from Tulsa.

R. E. EVANS, BERT SCHERER and W. B. LEDFORD, all of Drilling & Exploration Co., have returned to this country from a 2-year term of service in Brazil. After a 2-month vacation, they will resume employment for Drilling & Exploration Co. in the California fields. Mr. Evans was in charge of transportation and was also a driller at Maceio, Brazil. Mr. Scherer was in charge of welding and also served as a driller at Maceio, while Mr. Ledford was tool pusher in charge at that point. J. E. BRANTLY, president of the company, has returned to California after a stay of several months in Brazil. The work is being carried on for the Brazilian Government.

C. E. KEEP, of British Burma Petroleum Co., Ltd., is now in the company's Burma field.

R. CHENEY HART, of London, England, with Venezuela Oilfields, Ltd., was a Fort Worth, Tex., visitor.

CHARLES H. POLLARD has resigned from Pure Oil Co., in Ganado, Tex., and has joined Continental Oil Co., Rio Grande City, Tex.

JACK D. WRATHER, youthful East Texas oil man, was married July 31 to Miss Molly O'Daniel, daughter of Senator O'Daniel of Texas.

ALBERT L. COPP has joined Gulf Oil Corp. in Managua, Nicaragua, coming to the oil company from the International Mining Co., in Bucaramanga, Colombia.

ARTHUR M. CORMANY, who has been relief-shift foreman at Shell Oil Co., Inc.'s Wilmington, Calif., refinery, has been advanced to shift foreman at the same plant.

E. C. BREENE, JR., has returned from Nigritos, Peru, where he was with International Petroleum Co., and is now in Evansville, Ind., where he is a drilling contractor.

JACK BAKER, NBC radio entertainer and star of the Breakfast Club, has leased acreage in the Caddo field near his home, Shreveport, La., and will drill 20 wells to develop the property.

DONALD E. CARR has been appointed manager of research and B. G. ALDRIDGE has been named chief engineer of Union Oil Co. of California in a reorganization program.

## Do You Remember?

From The Oil and Gas Journal Files

### 25 YEARS AGO

The recently expressed opinion of a nautical expert would indicate that the British naval authorities are quite well satisfied with the experiment of utilizing fuel oil for naval purposes under the severe test of the recent Jutland battle.

At a meeting of the Export Oil Corp., held in Tulsa, it was decided that Douglas Slingluff of New York, one of the corporation's vice presidents, would make a trip to Europe to look into the export situation.

John Daley, 46, Tulsa drilling contractor, was killed last week in a field accident. His body was taken to Parkersburg, W. Va., his former home.

### 20 YEARS AGO

In response to a request . . . President Warren G. Harding writes as follows: "I would like oil men of America to know that the Government is making every effort to protect righteous American interests in the oil world, and that the importance of American participation in (foreign) oil development generally is thoroughly appreciated."

At Lima, Ohio, on July 27, Timothy Spellacy, one of the best known oil men in the United States, reached the end of his very active career, and the announcement of his death produced genuine sorrow wherever he was known.

### 10 YEARS AGO

All oil wells in the prorated fields of Oklahoma making more than 25 bbl. a day were ordered shut down on Tuesday afternoon of this week by Gov. William H. Murray who, at the same time, established martial law for a distance of 50 ft. around each well in the 29 fields affected by his order.

The oil industry has given birth to a new allied trade, the production of natural dry ice through recovery of carbon dioxide gas.

E. S. PENNEBAKER, of New Orleans, La., and S. E. BRYANT of Austin, Tex., have joined the Texas Railroad Commission as petroleum engineers in the District 8 office at Midland, Tex.

R. C. ALDEN, director of research of Phillips Petroleum Co., Bartlesville, Okla., was guest commentator at the monthly review of oil news by oil writers in Tulsa, broadcast from Tulsa and Oklahoma City.

GAY CARROLL, comptroller of Humble Oil & Refining Co., was elected president of the recently chartered Houston, Tex., chapter of the Controllers' Institute of America at an organization meeting in the Houston Club last week.

WILLIAM J. HEALEY, T. J. THOMPSON, JR., and MYRON W. MATSON, three Bradford, Pa., oil men, were recently reelected officers of the Bradford Hospital. They are president, vice president and secretary, respectively.

IGNATIUS P. O'NEIL, president San Patricio Royalty Corp., Beeville, Tex., PHILLIP D. GULLY, geologist, Beeville, and A. D. LARSON, secretary Wellington Oil Co., San Antonio, Tex., are incorporators of the Celtic Oil Corp., at Beeville.

H. R. CULLEN, president of Quintana Petroleum Co., Houston, Tex., has purchased a 122-acre tract of land adjoining the municipal airport which he holds without profit as a public service for later use by city in enlargement of the airport.

GEORGE ECHOLS, independent producer and drilling contractor, Houston, Tex., long accustomed to getting around his various operations and making other long business trips in his private airplane, is now resorting to somewhat slower means of transportation as a result of selling his ship to Halliburton Oil Well Cementing Co. Mr. Echols' pilot, S. P. GILLEY, is now in the Army.

# *From an Oil Family*

Bart DeLaat, recently appointed assistant chief petroleum engineer of the Pure Oil Co., first stood on a derrick floor when he was about 5 years old in his native state of Indiana. As the son of an oil man, that early touch of petroleum stuck and he has been getting deeper into the industry in the 31 years since that youthful beginning.

*BART DeLAAT*

A brief look at the biographical log on Mr. DeLaat shows that he was born in Montpelier, Ind.; graduated from high school in East Denver, Colo., followed that by a 4-year course at Colorado School of Mines at Golden, where he majored in petroleum engineering and geology and then carried on technical research work at the University of Colorado at Boulder. In the 11 years since leaving Colorado, he has drilled deeper into the oil business in covering the Mid-Continent and Rocky Mountain areas as a district foreman, 8 years with Gulf Oil Corp. and the past 3 years with Pure Oil Co.

Mr. DeLaat joined Pure in the Illinois producing division at Olney in August 1938, as division petroleum engineer, and he was in that post until mid-June of this year when he was transferred into the company's general headquarters in Chicago. He has been active in oil circles, and he has written several articles on engineering production practices. He is currently chairman of the Illinois Basin chapter of the A.P.I., chairman of the eastern division of the committee on standardization of pumping equipment and engines, and a member of A.P.I.'s topical committee on production and practice.

Studies of the rate of penetration on rotary-drilling rigs have been one of his chief interests in recent years. Results of his investigations have been the basis for several technical articles on the subject and have contributed materially to the advancement of that science in petroleum engineering.

FRED VAN COVERN, of the American Petroleum Institute, is back at his New York office after 5 weeks in Washington, D. C.

JOE FORTENBERRY, who has been scouting for Phillips Petroleum Co. in the Shreveport, La., district, has been transferred to the Oklahoma City, Okla., district.

W. R. SPINDELL, who has been active in refinery sales and oil purchases for Skelly Oil Co., Tulsa, has left Skelly to take over the same tasks with Tansel Oil Co.

DON NORDLING, research geologist, Shell Oil Co., Inc., has been transferred from Wichita, Kans., to Tulsa, where he will serve as assistant district geologist for Oklahoma under R. E. SHUTT, division exploitation manager.

ALBERT ROTHROCKE, superintendent of Colombian Petroleum Co., at Barco, Colombia, and J. D. VANDER BERG, of Shell Oil Co., Inc., were guests of the Houston chapter of Nomads at a luncheon at the Houston Club, July 30.

JOHN TAYLOR, geologist with University Lands, at Midland, Tex., for the past 4 years, has resigned that position to become a member of the geological staff of Seaboard Oil Co. in its recently opened West Texas division office at Midland.

W. R. BRATCHES is the new general purchasing agent of Shell Oil Co., Inc., succeeding C. B. SINGLETON, who has been transferred to another department. Mr. Bratches was at one time stationed in Tulsa, and later went to San Francisco before going to New York City.

THOMAS G. MARKLEY, Houston, Tex.; A. J. BANKHEAD of Inez, Tex., and W. A. WATERBURY of Lake Charles, La., have organized a new company under the name of Markley-Bankhead, Inc., to engage in the drilling and production of oil. The company will have headquarters at Lake Charles

L. W. ELLIOTT, general manager of production for the Standard Vacuum Oil Co. at Palembang, Sumatra, of the Netherlands East Indies, left San Francisco by clipper Thursday to return to his headquarters after spending 3 weeks in the United States. He is returning via Honolulu and New Zealand. On his trip over he traveled from Singapore to New York City in 1 week. Previous to going to the East Indies in 1925, Mr. Elliott was employed in the Mid-Continent area by the Carter Oil Co.

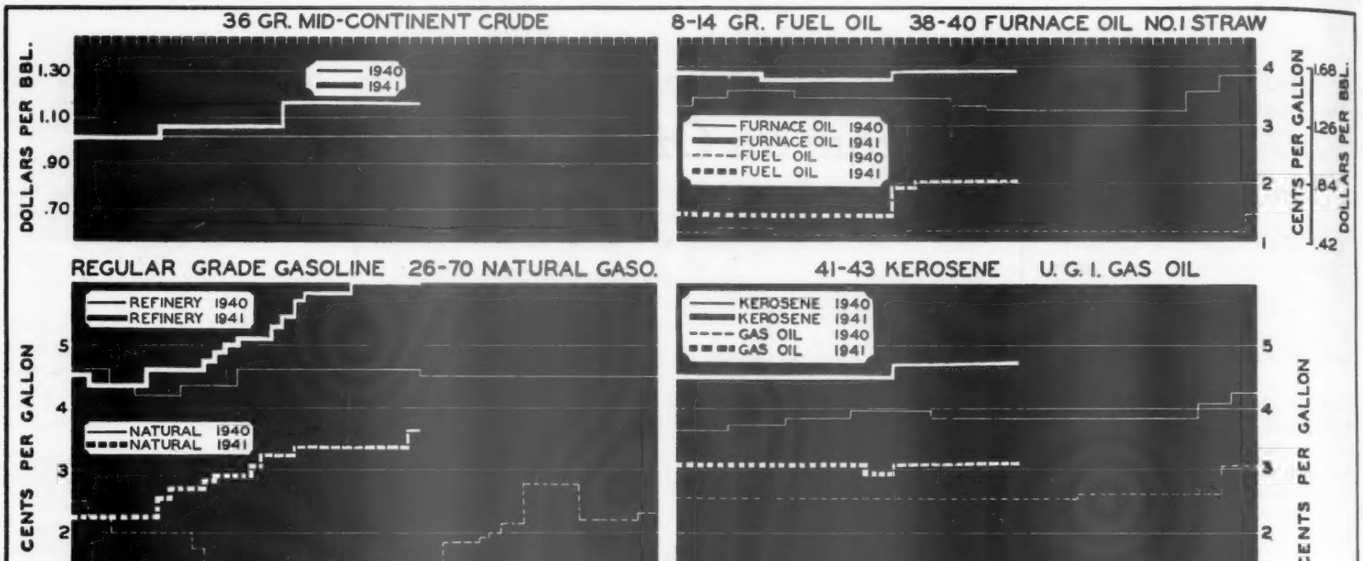
SHIFTS: E. R. BROCKWAY, geologist, Devonian Oil Co., from Fort Worth, Tex., to Shreveport, La.; E. C. HEIDRICH, JR., manager, Black-Knight Oil Co., from Peoria, Ill., to Northport Point, Mich.; C. D. ALLEN, superintendent, Continental Oil Co., from Princeton, Ind., to Evansville, Ind.; F. B. LOOMIS, JR., geologist, Shell Oil Co., Inc., from Canton, Miss., to Magnolia, Ark.; R. E. IRBY, superintendent, Socony-Vacuum Oil Co., from Upper Montclair, N. J., to New York City; R. K. TALLANT, manager, North Branch Dev. Co., from Wellsboro, Pa., to Fairfax, Va.; CHARLES F. REDMAN, JR., Phillips Petroleum Co., from Bartlesville, Okla., to Eureka, Kans.

J. P. EVANS, JR., of Shreveport, La.; CHARLES GHOLSON, Houston, Tex., and W. F. BRIDEWELL, Tyler, Tex., have called a meeting of the operators in the Tinsley field of Mississippi in an effort to form an operators committee and discuss proration, now under consideration for the field.

PALMER HUGHES, JR., with the Tulsa office of the Stanolind Oil & Gas Co., a reserve officer in the U. S. Navy, was called to active service and is now stationed at Harvard University, Cambridge, Mass., where he is taking 3 months' training in the Supply Corps school. After completion of this course, he will be ordered to active duty.

BURDETTE BLUE has announced his resignation as president of Indian Territory Illuminating Oil Co., coincident with the announcement of the liquidation of the assets of the company. He will act in an advisory capacity to various Cities Service interests, and will engage in the general practice of law in Tulsa, occupying space in the offices of the firm of Ramsey, Martin and Logan.

GROVER ELLIS, JR., Stanolind Oil & Gas Co., was elected president of the Derrick Club at the initial meeting of the club last week. This club is composed of young engineers and geologists in Houston and vicinity, and its purpose is to assist newcomers to the oil industry in Houston, to promote and advance the young engineer or geologist in his profession, and to keep a file of available positions, among other things. REDDY McDANNALD, McDannald Oil Co., was named vice president; GEORGE BLUM, Stanolind, secretary; and BEN MAXWELL, Stanolind, treasurer.




**Representative Mid-Continent Quotations on Crude Oil and Refined Products, Basis Oklahoma (Group 3)**

# *Mid-Continent Refinery Market Continues Gains in Strength*

By H. STANLEY NORMAN

ALL refinery products in the Mid-Continent tank-car market have strengthened another notch without actually breaking through the current highs of quoted prices. Still, reports of premiums paid for supplies purchased under emergency conditions are growing more frequent. Most refiners do not anticipate any general advance in the price structure until crude markets are lifted.

Consideration to higher prices is given with one eye on the OPACS which is spreading its influence over petroleum markets of other territories with each passing week. Pennsylvania refiners were requested this week to hold prices for lubricating oils to a level not exceeding 33 cents for 200-viscosity neutrals which is the low of the range currently quoted.

### Mid-Continent Ceiling Avoided

Mid-Continent refiners have so far escaped any direct appeal from OPACS for ceilings on product prices. Refiners realize, however, judging from experiences in other parts of the country, that any substantial increase would precipitate action. There is a general desire among refiners to delay or preferably escape limitations on the price ranges, giving them greater freedom of operation.

Higher prices for Mid-Continent lubricating oils, which have been advanced at frequent intervals since March in harmony with markets on Pennsylvania stocks, appear to be well established. Refiners are still far behind on shipments. Quotations on several premium grades of Mid-Continent lubricating oils have been withdrawn entirely and companies have instructed their sales departments to cease offerings even to old contract customers.

Motor-fuel shipments from Group 3 refineries are moving north in increasing quantities. Buyers in the Middle West states are clamoring for acceleration of deliveries but suppliers are unable to respond. Purchasers are being held strictly within limits of their contracts and buyers depending on the spot market for their supplies are meeting increasing resistance from refiners who have been drawing on inventories for several weeks.

Cracking operations are being maintained at record rates for this part of the summer season in an effort to satisfy demand for motor fuel. Ordinarily, at this juncture in the motor-fuel consuming season, Mid-Continent refiners are looking ahead to the winter demand for distillate fuels. Stocks of distillate fuel oil currently in Mid-Continent refinery and terminal storage are slightly higher than a year ago, about 1,620,000 bbl. against 1,455,000 bbl., but the increase has been modest in ratio to crude runs to stills.

### Refined Oil Market Barometer

Prices for petroleum products at all interior refinery markets are strong and crowding the top of quotation ranges. The order practically embargoing shipments to Japan has produced a reaction on motor-fuel markets in the Pacific Coast territory and lack of transportation facilities has dulled activity on the Gulf Coast. Shipments against contracts are moving at the top of quantity specifications.

**MID-CONTINENT:** Gasoline supplies difficult to locate.

**GULF COAST:** Lubricating-oil prices advanced. Other products dull.

**CALIFORNIA:** Motor-fuel prices react unfavorably to Japanese embargo.

**PENNSYLVANIA:** Lub advances halted by price-freezing order.

**CHICAGO:** Demand for gasoline and fuel oils breaking all records.

### Gasoline Inventories Deficient

Motor-fuel stocks in the hands of Mid-Continent suppliers are now about 500,000 bbl. below the inventories at this time a year ago. The deficient stock position presents an aggravated set of operating conditions because demand from this territory is 12 to 13 per cent higher than a year ago. Natural gasoline, currently quoted at 3⅝ cents per gallon for Oklahoma and Kansas production for northern movement, is among the strongest products on the list. The current price of 3⅝ cents for 26-70 material in Oklahoma has prevailed since the third week in July. The quotation of 3⅜ cents in the July 31 issue of The Oil and Gas Journal was a typographical error.

The advance of 0.25 cent per gallon on fuel-oil prices throughout Ohio, made effective August 1 by Standard Oil Co. of Ohio, is evidence of the strength developing in distillate markets before the consuming season arrives. Operators of bulk terminals are stocking fuel oil to extent of their facilities and to the limits of their ability to locate material for prompt movement. Conditions in the market indicate that distributors anticipate higher fuel-oil prices throughout the country as soon as winter consumption starts. On the other hand, delay of Mid-Continent refiners in turning their facilities to production of fuels is preventing any large-scale operations by forward purchases.

Reports from all dealers and customers in the Middle West indicate that August requirements for motor fuel will break all existing records and that suppliers will be hard pushed before the middle of September to take care of regular demand.

# Higher Prices Likely to Come With Rationing on East Coast

By J. P. O'DONNELL

NEW YORK, Aug. 5.—Gasoline rationing, viewed as a certainty in the East Coast marketing area within a short time, is expected to be accompanied by higher prices for motor fuel as a compensation for increased costs. Tank-wagon prices were advanced 1 cent a gallon in Canada following the institution of the 7 p.m. to 7 a.m. service-station closing and since conservation methods adopted in the dominion apparently are being followed here it is regarded as probable that prices will be changed accordingly.

Compensation for increased costs is the most probable reason for anticipating price advances, however, since OPM has declared that higher costs justify higher prices. With a reduction in the volume of sales, costs are bound to rise on a per gallon basis. In addition to the patent increase in marketing costs, there are also increases in transportation costs. The combination of the two is certain to result in higher prices to the consumer.

The 12-hour closing of service stations is not expected to bring a great reduction in gasoline consumption in the East Coast area since there will still be ample time for motorists to fill all their requirements. The step is regarded as a "conditioning" move to acquaint the motoring public with the seriousness of the situation and to prepare it for the more drastic steps which must follow as more tankers are turned over to the British. Therefore, increased marketing costs, upon which higher prices are expected to be justified, at least partially, are not anticipated until actual rationing is begun "sometime after September 1."

The beginning of August finds East Coast oil inventories in comparatively good condition and better in some respects than that which existed at the end of July. Stocks of the major refined products actually increased during July. From June 28 to July 26 aggregate stocks of gasoline, light fuel oil and residual fuel oil increased from 40,549,000 bbl. to 42,916,000 bbl., an increase of 2,367,000 bbl., or very close to 6 per cent. This emphasizes the fact that there is no immediate need for curtailment and virtually assures postponement of rationing until after Labor Day.

The most encouraging increase during the month of July was in inventories of light fuel oil. East Coast stocks rose 3,000,000 bbl. during that month, an average of close to 750,000 bbl. per week. In the same period of last year the increase was only slightly more than 3,000,000 bbl. As a result of the increase during July, stocks of light fuel oil on August 1 were approximately 1,000,000 bbl. under the corresponding level of a year ago.

Motor-fuel stocks were also maintained fairly well in July this year as compared to the same month of 1940. East Coast stocks fell off approximately 1,350,000 bbl. in July this year against 1,200,000 bbl. in July 1940. Against the comparatively favorable showing of gasoline and light fuel oil, however, is the definitely unsatisfactory status of residual fuel. Residual fuel-oil stocks increased about 730,000 bbl. in July this year against 1,600,000 bbl. in July a year ago. On August 1, 1941, East Coast residual were approximately 1,500,000 bbl. less than they were on the corresponding date of 1940 which, in view of the predicted 18 per cent increase in demand in the third quarter and 8.5 per cent in the fourth quarter, is definitely discouraging.

Price wise the East Coast market continued virtually static last week though it was reported that several additional smaller companies were asking 5.25 cents for No. 2 fuel oil. Major companies continued to offer No. 2 fuel oil at 4.9 cents, however, and there was no general increase. Other New York Harbor prices were likewise unchanged with motor fuel of 72-74 octane quoted generally at 8.5 cents, kerosene at 5.5 cents; diesel fuel at $2 per barrel and Bunker C fuel at $1.35 to $1.45.

The increase of 0.5 cent announced by Standard Oil Co. of Ohio, effective throughout that state August 1, in the price of kerosene and light fuel oil may have a beneficial effect in the neighboring East Coast district. The increase in Ohio makes the state-wide tank-wagon price on No. 2 heating oil 8 cents per gallon. This contrasts with 6.7 cents in metropolitan New York and 7 cents in suburban areas. This spread, coupled with the higher costs of the eastern areas, should justify an increase in kerosene and light-fuel-oil quotations along the Atlantic seaboard.

Predicted increases in Pennsylvania lubricating oils were realized during the past week, affecting all grades from steam refined stock to high-viscosity neutrals. Steam refined stock quotations were up uniformly 1 cent, ranging from 14 cents on 600 steam refined stock to 16 on 630 flash material. Bright stock quotations were likewise advanced 1 cent, making the minimum on 25 pour material 25 cents though it was reported that some suppliers are asking 27 cents. The largest of the increases came in the closely held neutrals now quoted at 33 to 36 cents for 25 pour, 150 viscosity, and at 36 to 40 cents for 25 pour, 200 viscosity, raises of 2 and 3 cents, respectively.

The Pennsylvania lubricating-oil market is described as the tightest on record. Recent reports of the N.P.A. indicate that sales are at the highest levels in years and reveal that inventories have steadily declined with neutral stocks at the lowest point in almost 3 years. Coupled with this strong inventory position is prospective demand for Pennsylvania lubes the best in years as a result of the increased industrial activity and the East Coast shortage.

## Coastal Lubricating Oils Advanced 1 to 2 Cents

HOUSTON, Tex., Aug. 4.—Advances of 1 to 2 cents per gallon on all grades of coastal lubricating oils are in effect on the Gulf Coast this week. Spot sales already are bringing the higher prices. Material moved on contract will be at these new prices after August 8.

Increasing tightness has been felt in lubricating oils for the past several weeks although spot sales have not been specially heavy. Buyers needing material for immediate delivery, however, are finding difficulty in finding supplies. Considerable material is being taken out of contract.

Quotations on other products also continue steady to firm although there is no trading of importance. The situation apparently has settled to one of watchful waiting. There is no inducement for buyers to come into the market except to meet immediate necessities. Unless refiners are able to get the present ceiling of 6 cents for gasolines set aside, the market already is over the top, and buyers have nothing to gain by ordering now, and in view of the difficulties of transportation are inclined to hold out.

Gas oils and fuel oils are still uncertain. Suppliers are holding their quotations on the prospects of increased demand this fall.

## *A.P.I. Weekly Refinery Statistics*

**Week Ended August 2, 1941**

| | Capacity reporting (per cent) | Total gasoline stocks (bbl.) | Residual fuel-oil stocks (bbl.) | Gas oil and distillate stocks (bbl.) | Daily crude runs (bbl.) |
|---|---|---|---|---|---|
| East Coast | 100.0 | 21,438,000 | 9,989,000 | 13,069,000 | 593,000 |
| Appalachian | 83.8 | 3,091,000 | 505,000 | 461,000 | 137,000 |
| Ind., Ill., and Ky. | 84.4 | 16,067,000 | 3,715,000 | 4,526,000 | 602,000 |
| Okla., Kans., and Mo. | 80.7 | 6,815,000 | 2,070,000 | 1,684,000 | 315,000 |
| Inland Texas | 63.2 | 2,058,000 | 1,278,000 | 440,000 | 124,000 |
| Texas Gulf | 91.0 | 12,062,000 | 7,595,000 | 6,748,000 | 937,000 |
| Louisiana Gulf | 89.1 | 3,157,000 | 1,702,000 | 1,618,000 | 152,000 |
| N. Louisiana and Ark. | 49.9 | 431,000 | 463,000 | 288,000 | 51,000 |
| Rocky Mountains | 50.1 | 1,279,000 | 473,000 | 131,000 | 50,000 |
| California | 90.9 | 14,416,000 | 65,485,000 | 11,568,000 | 544,000 |
| Total reported | 86.3 | 80,814,000 | 93,275,000 | 40,533,000 | 3,505,000 |
| Est. unreported | ..... | 5,965,000 | 1,525,000 | 900,000 | 340,000 |
| *Est. total | ..... | †86,779,000 | 94,800,000 | 41,433,000 | 3,845,000 |
| *Est. total previous wk. | ..... | 86,945,000 | 93,855,000 | 40,197,000 | 3,920,000 |
| *Aug. 3, 1940 | ..... | 88,892,000 | 106,265,000 | 39,594,000 | 3,510,000 |

*Bureau of Mines. †Includes 7,673,000 bbl. aviation gasoline.

## Stocks of Crude Oil in the United States

(BUREAU OF MINES ESTIMATE)

| | |
|---|---|
| Week ended July 26, 1941 | 252,728,000 barrels |
| Week ended July 19, 1941 | 254,048,000 barrels |
| Week ended July 27, 1940 | 262,579,000 barrels |

Figures do not include stocks of heavy, unrefinable California crude.

# RETAIL OIL MARKETS...

Tank-wagon and filling-station prices on gasoline and kerosene furnished by larger marketing firms

Prices as of August 5, 1941

### Taxes

**The gasoline quotations given in the following tables include the 1½-cent federal tax, as well as state, county, and city taxes. The gasoline is the regular or standard grade. In most areas lower grades and a premium grade also are available.**

### Standard Oil Co. (Indiana)

| | Gasoline Tank wag. | Dlr. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| Chicago, Ill. | 16.1 | 14.1 | 4.5 | 10.3 |
| Decatur | 15.4 | 13.4 | 4.5 | 9.0 |
| Joliet | 16.4 | 14.1 | 4.5 | 10.3 |
| Peoria | 16.2 | 14.2 | 4.5 | 10.1 |
| Quincy | 14.9 | 11.9 | 4.5 | 10.0 |
| Davenport, Ia. | 16.2 | 14.7 | 4.5 | 10.1 |
| Des Moines | 15.9 | 12.9 | 4.5 | 9.8 |
| Mason City | 16.2 | 14.7 | 4.5 | 10.1 |
| Duluth, Minn. | 17.7 | 16.2 | 5.5 | 10.6 |
| Mankato | 17.4 | 15.9 | 5.5 | 10.3 |
| Minneapolis | 17.4 | 15.9 | 5.5 | 10.3 |
| La Crosse, Wis. | 17.4 | 15.9 | 5.5 | 10.3 |
| Green Bay | 17.7 | 16.2 | 5.5 | 10.6 |
| Milwaukee | 17.6 | 16.1 | 5.5 | 10.5 |
| Detroit, Mich. | 15.9 | 14.4 | 4.5 | 9.6 |
| Grand Rapids | 15.9 | 14.4 | 4.5 | 9.6 |
| Saginaw | 15.9 | 14.4 | 4.5 | 9.6 |
| Evansville, Ind. | 16.9 | 15.4 | 5.5 | 9.6 |
| Indianapolis | 17.1 | 15.2 | 5.5 | 9.8 |
| South Bend | 17.5 | 16.0 | 5.5 | 10.2 |
| Fargo, N. D. | 18.4 | 16.9 | 5.5 | 11.3 |
| Huron, S. D. | 17.8 | 16.3 | 5.5 | 10.7 |
| Kansas City, Mo. | 14.4 | 12.9 | 4.5 | 9.1 |
| St. Louis | 14.4 | 12.9 | 4.5 | 9.8 |
| St. Joseph | 15.7 | 14.2 | 4.5 | 8.9 |
| Wichita, Kans. | 14.8 | 12.7 | 4.5 | 8.0 |

***State tax 2 cents, 1-cent city tax, and 1½-cent federal tax.**

**Exclusive of state general sales taxes.**

**Discounts to commercial consumers. On purchases per month off tank-wagon prices: 1,000 gal. or more, 1.5 cents off, minimum delivery 25 gal.**

### Stanolex Fuel Oil in Chicago

**Effective July 17, 1941, f.o.b. Chicago, tank-wagon prices: Standard heater oil, 1-99 gal., 8.75 cents; 100-149 gal., 7.75 cents; 150 gal. and over, 7.25 cents. Stanolex fuel oil No. 1, 1-99 gal., 8.5 cents; 100-149 gal., 7.5 cents; 150-399 gal., 7.25 cents; 400 gal. and over, 6.75 cents. Stanolex furnace oil, 1-99 gal., 8.5 cents; 100-149 gal., 7.5 cents; 150-399 gal., 7.25 cents; 400 gal. and over, 6.75 cents. Stanolex fuel oil A, 1-99 gal., 8.0 cents; 100-399 gal., 7.0 cents; 400-749 gal., 6.0 cents, 750 gal. and over, 5.25 cents. Stanolex fuel oil B, 1-99 gal., 8.0 cents 100-399 gal., 7.0 cents; 400-749 gal., 6.0 cents; 750 gal. and over 5.25 cents. Stanolex Bunker C fuel oil, 1-399 gal., 6.5 cents; 400-999 gal., 5.5 cents; 1,000 gal. and over, 4.5 cents.**

### Ohio

STANDARD OIL CO. OF OHIO

| | Gasoline Cons'r tank wag. | Dlr. | Divided Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| Ohio points | 16.0 | 15.0 | 5.5 | *9.0 |

***Includes state tax of 1 cent.**

### Southern District

STANDARD OIL CO. (KENTUCKY)

| | Gasoline Cons'r tank wag. | Net dlr. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| Atlanta, Ga. | 18.00 | 18.00 | 7.5 | 10.0 |
| Augusta | 18.00 | 18.00 | 7.5 | 9.5 |
| Macon | 18.00 | 18.00 | 7.5 | 10.0 |
| Savannah | 17.00 | 17.00 | 7.5 | 9.0 |
| Birmingham | 18.50 | 18.50 | 8.5 | 8.0 |
| Mobile | 18.50 | 18.50 | 9.5 | 8.5 |
| Montgomery | 19.50 | 19.50 | 9.5 | 10.0 |
| Jackson, Miss. | 17.00 | 17.00 | 7.5 | 9.0 |
| Vicksburg | 17.00 | 17.00 | 7.5 | 8.5 |
| Jacksonville, Fla. | 18.00 | 18.00 | 8.5 | 8.0 |
| Miami | 18.00 | 18.00 | 8.5 | 8.0 |
| Pensacola | 18.50 | 18.50 | 9.5 | 8.0 |
| Tampa | 18.00 | 18.00 | 8.5 | 8.0 |
| Lexington, Ky. | 17.00 | 17.00 | 6.5 | 9.0 |
| Covington | 15.0 | 15.0 | 6.5 | 9.0 |
| Louisville | 16.50 | 16.50 | 6.5 | 8.5 |
| Paducah | 16.50 | 16.50 | 6.5 | 8.5 |

**Price basis to tank-wagon consumers, effective January 4, 1937, 3 cents per gallon below tank-wagon price.**

**Montgomery, Ala., has a county tax of 1 cent per gallon, and a city tax of 1 cent per gallon on gasoline, in addition to state tax, and 1 cent per gallon on kerosene. Mobile, Ala., has a city gasoline tax of 2 cents per gallon; Birmingham, Ala., has a city gasoline tax of 1 cent per gallon; Pensacola, Fla., has a city gasoline tax of 1 cent. All are included in the table.**

### Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

| | Gasoline Cons'r tank car | Dlr. tank wag. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| Atlantic City | 13.0 | 14.0 | 4.5 | 7.8 |
| Newark | 13.0 | 14.0 | 4.5 | 7.8 |
| Annapolis | 13.85 | 15.35 | 5.5 | 9.5 |
| Baltimore | 13.25 | 14.75 | 5.5 | 8.5 |
| Cumberland | 14.65 | 16.15 | 5.5 | 10.0 |
| Washington, D. C. | 11.50 | 13.00 | 3.5 | 9.0 |
| Danville, Va. | 15.45 | 17.45 | 6.5 | 10.25 |
| Norfolk | 14.25 | 16.25 | 6.5 | 10.00 |
| Petersburg | 14.55 | 16.55 | 6.5 | 11.00 |
| Richmond | 14.55 | 16.55 | 6.5 | 11.00 |
| Roanoke | 15.75 | 17.75 | 6.5 | 10.50 |
| Charles'n, W. Va. | 15.55 | 18.05 | 6.5 | 11.5 |
| Parkersburg | 14.85 | 17.35 | 6.5 | 11.2 |
| Wheeling | 15.25 | 17.35 | 6.5 | 11.8 |
| Charlotte, N. C. | 17.40 | 18.90 | 7.5 | 9.3 |
| Hickory | 17.95 | 19.45 | 7.5 | 10.3 |
| Mount Airy | 17.80 | 19.30 | 7.5 | 9.5 |
| Raleigh | 17.15 | 18.65 | 7.0 | 10.3 |
| Salisbury | 17.45 | 18.95 | 7.5 | 10.7 |
| Charleston, S. C. | 15.25 | 17.75 | 7.5 | 9.25 |
| Columbia | 16.10 | 18.60 | 7.5 | (*) |
| Spartanburg | 16.80 | 19.30 | 7.5 | (*) |

Price basis to Essolene undivided dealers: Dealer tank-wagon price less 0.5 cent per gallon. Price basis to commercial consumers, effective March 3, 1937, in Maryland, District of Columbia, and in Arlington and Fairfax counties in Virginia and March 12 in New Jersey: To contract accounts purchasing at least one full compartment at a time by hose connection, on yearly purchases: From 2,500 to 100,000 gal., consumer tank-wagon price at time and place of delivery: 100,000 gal. per year, consumer tank-car price plus 0.5 cent per gallon. Consumer tank-wagon price generally will be equivalent to dealer tank-wagon price less 0.5 cent per gallon.

Effective January 16, 1939, in North Carolina the commercial consumer schedule became as follows: Single deliveries of 50 gal. or more, consumer tank-wagon price. Single deliveries of less than 50 gal., 4 cents per gallon over consumer tank-wagon price. Generally the posted consumer tank-wagon price will be equivalent to the dealer price, less 0.5 cent per gallon. The above policy also applies in South Carolina, effective January 23, 1939.

*Kerosene business of the company at these points now exclusively handled by dealers.

### Pennsylvania and Delaware

ATLANTIC REFINING CO.

| | Gasoline Cons'r tank car | Dlr. tank wag. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| Philadelphia, Pa. | 14.0 | 15.0 | 5.5 | 10.0 |
| Pittsburgh | 14.5 | 15.5 | 5.5 | 10.5 |
| Allentown | 14.5 | 15.5 | 5.5 | 10.5 |
| Erie | 14.5 | 15.5 | 5.5 | 10.0 |
| Scranton | 14.5 | 15.5 | 5.5 | 10.5 |
| Altoona | 14.5 | 15.5 | 5.5 | 10.5 |
| Dover, Del. | ... | 15.5 | 5.5 | 10.5 |
| Wilmington | ... | 15.0 | 5.5 | 10.0 |

Price basis to undivided dealers, dealer tank-wagon price less 0.5 cent per gallon.

Discount on kerosene, 2 cents per gallon off tank-wagon price on tank-wagon deliveries of 25 gal. or more at one time.

### Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA

| | Gasoline Tank truck | Serv. sta. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| San Francisco | 17.5 | 18.5 | 4.5 | 11.5 |
| Los Angeles | 17.0 | 18.0 | 4.5 | 10.0 |
| Fresno, Calif. | 18.5 | 19.5 | 4.5 | 12.5 |
| Phoenix, Ariz. | 21.5 | 22.5 | 6.5 | 12.5 |
| Reno, Nev. | 20.5 | 21.5 | 5.5 | 13.5 |
| Portland, Ore. | 20.0 | 21.0 | 6.5 | 13.5 |
| Seattle, Wash. | 20.0 | 21.0 | 6.5 | 13.5 |
| Spokane | 21.5 | 22.5 | 6.5 | 16.5 |
| Tacoma | 20.0 | 21.0 | 6.5 | 13.5 |

Discount to dealers: On gasoline, off tank-wagon price, to 100 per cent dealers, 3 cents. To commercial consumers: On tank-wagon price; on single deliveries of 40 gal. and over, advance quantity discount extended at time of delivery, 3 cents. Service-station schedule applies on single deliveries less than 40 gal. On kerosene in tank-car, transport-truck, and trailer delivery, 3 cents off tank-wagon price; plant deliveries to jobbers, 2.5 cents below tank wagon.

March 18, 1939, split dealer discount was canceled.

### New York and New England

SOCONY-VACUUM OIL CO., INC.

| | Gasoline Comm. tank wag. | Dlr.* tank wag. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| Albany | 14.2 | 14.7 | 5.5 | 7.6 |
| Met. New York | 14.4 | 14.9 | 5.5 | 7.9 |
| Buffalo | 14.5 | 15.0 | 5.5 | 8.3 |
| Rochester | 15.1 | 15.6 | 5.5 | 8.8 |
| Syracuse | 14.8 | 15.3 | 5.5 | 8.7 |
| Portland, Me. | 14.6 | 15.1 | 5.5 | 8.0 |
| Manchester, N. H. | 15.6 | 16.1 | 5.5 | 8.9 |
| Burlington, Vt. | 15.2 | 15.7 | 5.5 | 8.2 |
| Boston, Mass. | 13.2 | 13.7 | 4.5 | 7.9 |
| Worcester | 13.8 | 14.3 | 4.5 | 8.0 |
| Hartford, Conn. | 13.9 | 14.4 | 4.5 | 7.5 |
| New Haven | 13.3 | 13.8 | 4.5 | 6.8 |
| Providence, R. I. | 13.3 | 13.8 | 4.5 | 7.7 |

*Undivided.

Effective August 8, 1940, the company changed its commercial consumer policy in New York and New England to the following:

Full compartment deliveries: Accounts buying less than 20,000 gal. annually, 0.5 cent above the commercial-consumer price; accounts buying from 20,000 to 120,000 gal. annually, commercial-consumer price; accounts buying 120,000 gal. annually and above, 0.25 cent off consumer price. Split compartment deliveries: Delivery of less than a full compartment, 250 gal., commercial-consumer price plus 1 cent. Steel-barrel deliveries: Commercial price plus 3 cents.

### Rocky Mountain District

CONTINENTAL OIL CO.

| | Gasoline Tank wag. | Inc. tax | Kero. tank wag. |
|---|---|---|---|
| Denver, Colo. | 14.5 | 5.5 | 11.0 |
| Grand Junction | 18.0 | 5.5 | 12.5 |
| Pueblo | 14.5 | 5.5 | 9.5 |
| Casper, Wyo. | 17.0 | 5.5 | 12.0 |
| Cheyenne | 16.0 | 5.5 | 11.5 |
| Billings, Mont. | 18.0 | 6.5 | 12.5 |
| Butte | 17.0 | 6.5 | 13.5 |
| Great Falls | 17.0 | 6.5 | 12.5 |
| Helena | 17.0 | 6.5 | 13.0 |
| Salt Lake, Utah | 18.5 | 6.5 | 14.5 |
| Boise, Idaho | †20.1 | 6.5 | 16.5 |
| Twin Falls | †21.1 | 6.5 | 17.0 |
| Albuquerque, N. M. | *17.5 | 7.0 | 10.0 |
| Roswell | *15.5 | 7.0 | 8.5 |
| Santa Fe | ‡18.0 | 7.5 | 10.0 |

*Includes city tax of 0.5 cent. †Includes toll-bridge tax of 1 mill. ‡Includes city tax of 1 cent.

Tank wagon represents price to consumers. Dealer represents price to dealers. If no dealer price is quoted, the tank-wagon price applies to all classes of trade.

### Central South District

STANDARD OIL CO. OF LOUISIANA

| | Gasoline Cons'r tank car | Dlr. tank wag. | Inc. tax | Kero. tank wag. |
|---|---|---|---|---|
| New Orleans, La. | 15.25 | 17.25 | 8.5 | ‡10.0 |
| Baton Rouge | 15.25 | 17.25 | 8.5 | ‡10.5 |
| Alexandria | 15.25 | 17.25 | 8.5 | ‡10.5 |
| Lafayette | 15.50 | 18.00 | 8.5 | ‡10.0 |
| Lake Charles | 15.50 | 18.00 | 8.5 | ‡10.0 |
| Shreveport | 15.0 | 17.5 | 8.5 | 10.0 |
| Knoxville, Tenn. | 18.00 | 20.50 | 8.5 | 12.5 |
| Memphis | 16.25 | 18.75 | 8.5 | 10.5 |
| Chattanooga | 17.50 | 19.5 | 8.5 | 11.0 |
| Nashville | 17.75 | 19.5 | 8.5 | 10.0 |
| Bristol | 18.25 | 18.75 | 8.5 | 12.0 |

Essolene at dealer price less 0.5 cent per gallon to undivided dealers.

‡Includes 1-cent state tax.

Price basis to commercial consumers: Effective May 15, 1937, deliveries of 50 gal. or more in one territory take posted consumer tank-wagon price. Accounts taking deliveries of less than 50 gal. at one time pay posted consumer tank-wagon price plus 4 cents per gallon. Generally, the posted consumer tank-wagon price will be equivalent to the dealer price less 0.5 cent per gallon. Kerosene prices include 1-cent state tax.

Effective February 24, 1939, the company reestablished in New Orleans the commercial consumer policy on motor fuel effective in the rest of the state.

Effective December 12, 1938, the company revised its commercial consumer policy on motor fuel in New Orleans, as follows: Single deliveries of less than 50 gal., consumer tank car plus 2 cents per gallon 50 to 199 gal., consumer tank car plus 1 cent per gallon; 200 gal. and over, consumer tank car plus 0.5 cent per gallon.

### Oklahoma and Arkansas

CONTINENTAL OIL CO.

| | Gasoline Tank wag. | Incl. tax | Kero. tank wag. |
|---|---|---|---|
| Texarkana, Ark. | 14.0 | 5.5 | 6.0 |
| Fort Smith | 15.5 | 7.0 | 6.5 |
| Little Rock | 17.25 | 8.0 | 8.0 |
| Muskogee, Okla. | 15.5 | 7.0 | 8.0 |
| Oklahoma City | 15.0 | 7.0 | 8.0 |
| Tulsa | 15.0 | 7.0 | 8.0 |

Tank wagon represents price to consumers. If no dealer price is quoted, the tank-wagon price applies to all classes of trade.

### Nebraska

STANDARD OIL CO. OF NEBRASKA

| | Gasoline Tank wag. | Dlr. | Incl. tax | Kero. tank wag. |
|---|---|---|---|---|
| Omaha | 17.0 | 14.4 | 6.5 | 9.8 |
| McCook | 18.5 | 15.4 | 6.5 | 9.5 |
| Norfolk | 18.4 | 16.9 | 6.5 | 10.3 |
| North Platte | 18.8 | 15.9 | 6.5 | 10.7 |
| Scottsbluff | 18.4 | 15.5 | 6.5 | 10.0 |

Discounts to commercial consumers for tank-wagon deliveries covered only by standard commercial consumers contract, effective January 1, 1935.

### Texas

| | Gasoline Tank wag. | Serv. sta. | Incl. tax | Kero. tank wag |
|---|---|---|---|---|
| Dallas, Tex. | 13.0 | 16.5 | 5.5 | 7.0 |
| Fort Worth | 13.0 | 16.5 | 5.5 | 7.0 |
| Houston | 13.0 | 17.0 | 5.5 | 8.0 |
| San Antonio | 13.0 | 17.0 | 5.5 | 8.0 |

### Naphtha

STANDARD OIL CO. (INDIANA)

| | Tank wagon* |
|---|---|
| Oleum spirits | 16.2 |
| V.M.&P. naphtha | 16.5 |
| Cleaners' naphtha | 15.5 |
| Stanisol | 15.5 |

***Prices include 3-cent Illinois tax but not 1-cent federal tax nor 2 per cent retail occupational tax.**

**Prices f.o.b. Chicago. Each price subject to discount of 1 cent per gallon for 150-gal. lots if covered by contract.**

### Canada*

3-Star Imperial Gasoline

IMPERIAL OIL, LTD.

| | Gasoline Tank wag. | Incl. tax | Kero. tank wag |
|---|---|---|---|
| Halifax, N. S. | 28.5 | 13.0 | 19.0 |
| St. John, N. B. | 28.5 | 13.0 | 19.0 |
| Montreal, Que. | 27.0 | 11.0 | 17.5 |
| Toronto, Ont. | 27.5 | 11.0 | 18.0 |
| Hamilton, Ont. | 27.5 | 11.0 | 18.0 |
| Winnipeg, Man. | 30.5 | 10.0 | 22.5 |
| Brandon, Man. | 31.0 | 10.0 | 23.0 |
| Regina, Sask. | 28.0 | 10.0 | 20.0 |
| Saskatoon, Sask. | 30.8 | 10.0 | 22.8 |
| Edmonton, Alta. | 28.9 | 10.0 | 20.9 |
| Calgary, Alta. | 26.0 | 10.0 | 18.0 |
| Vancouver, B. C. | 25.0 | 10.0 | 24.0 |

*Imperial gallon used in Canada.

Divided dealers pay tank-wagon prices. Discount to undivided dealers, 1 cent below tank-wagon price. In Maritime Provinces both divided and undivided dealers pay tank-wagon price.

## Tank-Wagon Changes

Standard Oil Co. of Kentucky, effective July 16, advanced tank wagon and dealer prices of regular gasoline 0.25 cent per gallon at all marketing points quoted in Kentucky, Mississippi, Alabama, Georgia and Florida, excepting Covington, Ky.

Standard Oil Co. of Louisiana revised its tank-car posting at Chattanooga, Tenn., announcing that an advance of 1 cent there reported on June 24 was in error.

Standard Oil Co. of Ohio advanced the tank-wagon price on kerosene and all fuel oils 0.25 cent per gallon throughout Ohio, effective August 1.

# PRICES OF REFINED PRODUCTS...

All quotations f.o.b. plant in cars for interstate or export movement except as otherwise noted

Prices as of August 5, 1941
**(Most prices in cents per gallon)**

The quotations are exclusive of the federal excise taxes of 1.5 cents a gallon on gasoline and 4 cents a gallon on lubricating oils. Octane ratings in Middle West, Mid-Continent, and Southwest are based on A.S.T.M. method of testing.

## Refinery Gasoline

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| 72-74 octane (regular) | .06 | .0625 |
| 63-66 octane | .05625 | .05875 |
| 60 octane and below | .0525 | .055 |
| 60-62 400 grades: | | |
| 72-74 octane (regular) | .06 | .0625 |
| 63-66 octane | .05625 | .05875 |
| 60 octane and below | .0525 | .055 |

**NORTH TEXAS—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| 72-74 octane (regular) | .05875 | .06125 |
| 63-66 octane | .0550 | .06 |
| 60 octane and below | .05125 | .05375 |
| 60-62 400 | .05 | .06 |

**NORTH LOUISIANA (Ark. and N. La. delivery)—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| 72-74 octane (regular) | .05875 | .06125 |
| 63-66 octane | .0550 | .05875 |
| 60 octane and below | .05 | .06 |

**ARKANSAS (Ark. and N. La. del.)—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| 72-74 octane (regular) | .05875 | .06125 |
| 60 octane and below | .05 | .05375 |

**CHICAGO (Based on Group 3)—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| 72-74 octane (regular) | .06 | .0625 |
| 63-66 octane | .05625 | .05875 |
| 60 octane and below | .0525 | .055 |
| 60-62 400 grades: | | |
| 72-74 octane (regular) | .06 | .0625 |
| 63-66 octane | .05625 | .05875 |
| 60 octane and below | .0525 | .055 |

**PENNSYLVANIA (inland refineries)—**

| | | |
|---|---|---|
| 74-76 octane (regular) | .0750 | .0775 |
| 80 octane (1939 Research) | | .0800 |

**CALIFORNIA (domestic movement)—**

| | | |
|---|---|---|
| 58-60 400, 65 oct. and higher | .06 | .07 |
| 54-58 U. S. Motor | .0575 | .0625 |

**EAST COAST (domestic)—**

| | | |
|---|---|---|
| U. S. Motor (minimum 72 octane): | | |
| New York (Bayonne) * | .08 | .085 |
| Philadelphia | .08 | .0825 |
| Boston | .085 | .09 |
| Baltimore | .08 | .0825 |
| Charleston, S. C. | .0725 | .0775 |

*All grades of gasoline ½ to ¼ cent less for barge shipments. New York Harbor prices are for New York and New England delivery. Prices for New Jersey delivery ¼ cent lower.

**GULF COAST (domestic)—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| 80 (research) | | .0625 |
| 72-74 octane (leaded) | .0575 | .05875 |
| 70-72 octane (unleaded) | .05875 | .06 |
| 68-70 octane (unleaded) | .05625 | .05875 |

## Natural Gasoline

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| Grade 26-70 | | .03625 |
| Grade 18-55 | | .0425 |

**NORTH TEXAS—**

| | | |
|---|---|---|
| Grade 26-70 | | .0325 |
| Grade 18-55 | | .0375 |

**CALIFORNIA—**

| | | |
|---|---|---|
| 75-85 375-390 | .045 | .05 |

**NORTH LOUISIANA (Ark. and N. La. delivery)—**

| | | |
|---|---|---|
| Grade 26-70 | | .0325 |

## Tractor Fuel

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| 40-42 gr., 315-325 l.b.p. 110-flash, 540-550 e.p. | .0375 | .03875 |
| 41-43 gr., 300-320 l.b.p., 110-125 flash, 500-520 e.p. | .03875 | .04 |
| 46-48 gr., 210-230 l.b.p. 480 max., e.p. | .04125 | .0425 |

## Kerosene

(All kerosene water white)

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| 42-44 | .0450 | .0475 |
| 41-43 | .04375 | .04625 |

**NORTH TEXAS—**

| | | |
|---|---|---|
| 41-43 | .0425 | .04625 |

**NORTH LOUISIANA (Ark. and N. La. delivery)—**

| | | |
|---|---|---|
| 41-43 | .04375 | .04625 |

**ARKANSAS (Ark. and N. La. del.)—**

| | | |
|---|---|---|
| 41-43 | .04375 | .04625 |

**PENNSYLVANIA (inland refineries)**

| | | |
|---|---|---|
| 46 | .05875 | .06125 |
| 45 | .06 | .06125 |

**CHICAGO (Based on Group 3)—**

| | | |
|---|---|---|
| 42-44 | .0450 | .0475 |
| 41-43 | .04375 | .04625 |

**CALIFORNIA (Pac. Coast market)—**

| | | |
|---|---|---|
| 38-40 high-burning test | .045 | .055 |

**NEW YORK (Bayonne, N. J.)—**

| | | |
|---|---|---|
| 41-43 | | .055 |

**GULF COAST (domestic)*—**

| | | |
|---|---|---|
| 41-43 | | .035 |

*Barge price ⅛ cent lower.

## Furnace Oil

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| Range oil | .04 | .0425 |
| No. 1 white (38-42) | .03875 | .04125 |
| No. 1 straw (38-40) | .0350 | .03625 |
| No. 2 straw (32-36) | .0350 | .03625 |
| No. 3 zero to 10 (28-32) | .03375 | .0350 |

**NORTH TEXAS—**

| | | |
|---|---|---|
| No. 1 white (38-42) | .0375 | .03825 |
| No. 1 white (38-42) | .03825 | .04125 |

**NORTH LOUISIANA (Ark. and N. La. delivery)—**

| | | |
|---|---|---|
| No. 2 (32-36) | .0325 | .03375 |

**ARKANSAS (Ark. and N. La. del.)—**

| | | |
|---|---|---|
| No. 2, 32-36 | .0325 | .03375 |

**CHICAGO (Based on Group 3)—**

| | | |
|---|---|---|
| Range oil | .04 | .0425 |
| No. 1 white (38-42) | .03825 | .04125 |
| No. 2 straw (32-36) | .035 | .03625 |
| No. 3 zero to 15 (28-32) | .03375 | .035 |

**NEW YORK (Bayonne, N. J.)—**

| | | |
|---|---|---|
| *No. 1 | | .055 |
| *No. 2 | .049 | .0525 |
| *No. 3 | .049 | .0525 |

*Barge deliveries ⅛ to ¼ cent under above tank-car price.

## Gas Oil and Fuel Oil

(Gas oil per gal., fuel oil per bbl.)

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| No. 5, low pour point (18-22) | .95 | .90 |
| No. 6, 15 and above (10-16) | .85 | .90 |

**NORTH TEXAS—**

| | | |
|---|---|---|
| No. 5, low pour point (18-22) | .80 | .85 |
| No. 6, 15 and above (10-16) | .80 | .85 |

**NORTH LOUISIANA (Ark. and N. La. delivery)—**

| | | |
|---|---|---|
| 10-14 fuel oil, industrial | .80 | .85 |

**CHICAGO (Based on Group 3)—**

| | | |
|---|---|---|
| U.G.I. gas oil | .0325 | .035 |
| No. 5, low pour point (18-22) | .85 | .90 |
| No. 5, 15 and above (18-22) | .85 | .90 |
| No. 6, low pour point (10-16) | .85 | .90 |
| No. 6, 15 and above (10-16) | .85 | .90 |

**PENNSYLVANIA (inland refineries)—**

| | | |
|---|---|---|
| 36-40 | .0575 | .06 |

**CALIFORNIA—**

| | | |
|---|---|---|
| Los Angeles: | | |
| 30-40 gas oil, per bbl. | 1.10 | 1.25 |
| 24 plus diesel, per bbl. | 1.10 | 1.25 |
| 24 plus diesel (bunkers) | 1.20 | 1.35 |
| 12-16 (bunkers at tidewater) | .75 | .85 |
| 10-16 (cargo lots) | .75 | .85 |
| 12-17 (tank cars) | .65 | .75 |
| 10-17 (high sulfur) | .55 | .65 |
| San Joaquin Valley: | | |
| 10-18 (tank cars) | .70 | .85 |
| 24 plus diesel, per bbl. | 1.10 | 1.25 |
| San Francisco: | | |
| 24 plus diesel, per bbl. | 1.35 | 1.40 |
| 24 plus diesel (bunkers) | 1.40 | 1.50 |
| 10-16 (bunkers) | .80 | .85 |

**GULF COAST—**

| | | |
|---|---|---|
| No. 2 fuel | .0325 | .035 |
| 43-47 diesel | .035 | .03375 |
| 48-52 diesel | .03375 | .03625 |
| 53-57 diesel | .035 | .03875 |
| 58-and-above diesel | .03625 | .0375 |
| Diesel bunkers | | 1.45 |
| Bunker C (bulk cargoes) | .85 | .90 |
| Bunker C (bunkers) | | .85 |

**NEW YORK (Bayonne, N. J.)—**

| | | |
|---|---|---|
| 27 plus, gas oil | | .050 |
| 28-30 diesel (lighterage 6¼c per bbl.) | | 2.00 |
| 28-30 diesel (tank cars) | | .05 |
| Bunker C (to ocean-going ships in N. Y. Harbor $1.35 | | 1.45 |
| Industrial fuel (tank cars) | | .044 |

Lighterage charge 5c bbl. additional

## Bright and Steam Refined

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| 200-210 D, 10-25 | | .25 |
| 150-160 D, 0-10 | | .21 |
| 150-160 D, 10-25 | | .205 |
| 100-110 D, 0-10 | | .205 |
| 100-110 D, 10-25 | | .20 |
| Steam refined: | | |
| 600 dark green (untreated) | | .125 |

**PENNSYLVANIA—**

| | | |
|---|---|---|
| Bright Stocks (Pennsylvania Grade No. 8 color, 140-150 at 210, 545-550 flash): | | |
| 10 pour point | | .285 |
| 15 pour point | | .275 |
| 25 pour point | .25 | .26 |
| Steam refined: | | |
| 600 | .13 | .14 |
| 650 | .135 | .145 |
| 600 flash | .14 | .15 |
| 630 flash | .15 | .16 |

## Neutral Oil

(Vis. at 100° F. except Pennsylvania and color N.G.A.)

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| 0-10 pour point: | | |
| 150-3 | | .125 |
| 180-3 | | .13 |
| 200-3 | | .13 |
| 250-3 | | .145 |
| 280-3 | | .155 |
| 280-4 | | .15 |
| 300-3 | | .165 |
| 350-3½ | | .17 |
| 400-3½ | | .185 |
| 500-3½ | | .19 |
| 600-3½ | | .19 |
| 100-2½ paraffin oil 10-25 | | .0725 |
| 10-25 pour point: | | |
| 200-3 | | .125 |
| 250-3 | | .14 |
| 280-3 | | .15 |
| 280-4 | | .145 |

**CALIFORNIA (moving to dom. mkt.)—**

| | | |
|---|---|---|
| Pale oils: | | |
| 200-2½-3 | .0725 | .08 |
| 300-2½-3 | .0725 | .08 |
| 400-3-4 | .0725 | .08 |
| 450-3-4 | .0725 | .08 |
| 550-3-4 | .09 | .11 |
| 600-3-4 | .09 | .11 |
| Red oils: | | |
| 200-4-5 | .0725 | .08 |
| 300-5-6 | .0725 | .08 |
| 350-5-6 | .0925 | .115 |
| 400-5-6 | .0925 | .115 |
| 450-5-6 | .0925 | .115 |
| 500-5-6 | .095 | .115 |
| 600-5-6½ | .0925 | .115 |
| 700-6½ plus | .0925 | .115 |
| 750-6½ plus | .0925 | .115 |
| 900-6½ plus | .0925 | .115 |

**GULF COAST—**

| | | |
|---|---|---|
| Pale oils: | | |
| 100-3 | .0625 | 0.650 |
| 200-3 | .0850 | .0875 |
| 300-3 | .09 | .0925 |
| 500-3½ | .0975 | .10 |
| 750-3½ | .10 | .1025 |
| 1,200-3½ | .1025 | .10375 |
| 2,000-4 | .1050 | .1075 |
| 3,000-4 | .1225 | .1250 |

**PENNSYLVANIA—**

| | | |
|---|---|---|
| 150 vis. at 70° F., 3 color, 400-405 flash: | | |
| Zero pour point | | .375 |
| 10 pour point | | .365 |
| 15 pour point | | .355 |
| 25 pour point | .31 | .38 |
| 200 vis., at 70° F., 3 color: | | |
| Zero pour point | | .39 |
| 10 pour point | | .385 |
| 15 pour point | | .375 |
| 25 pour point | .33 | .40 |

## Wax and Petrolatum

(Prices per pound)

**OKLAHOMA (Group 3)—**

| | | |
|---|---|---|
| 124-126 (A.m.p.) w.c. scale | .05 | .0525 |

**PENNSYLVANIA (inland refineries)—**

| | | |
|---|---|---|
| 122-124 (A.m.p) w.c. scale | .05 | .055 |
| 124-126 (A.m.p.) w.c. scale | .05 | .0525 |

**NEW YORK—**

| | | |
|---|---|---|
| Wax in bags fully refined: | | |
| 125-127 (A.m.p.) wax | .0560 | .0640 |
| 128-130 (A.m.p.) wax | .0560 | .0660 |
| 130-132 (A.m.p.) wax | | .0585 |
| 133-135 (A.m.p.) wax | | .0615 |
| 135-137 (A.m.p.) wax | | .0640 |
| Crude scale: | | |
| 124-126 (A.m.p.) w.s. | .05 | .0525 |
| 124-126 (A.m.p.) y.s. | .05 | .0525 |
| Petrolatum in barrels, carload lots: | | |
| Dark green | | .02875 |
| Amber | .02875 | .03125 |
| Extra amber | .03125 | .03375 |
| Lily white | .04875 | .05375 |
| Snow white | .05625 | .05750 |
| Cream | .04125 | .05250 |

## Export Prices

### GASOLINE

**GULF COAST—**

| | | |
|---|---|---|
| 60-62 400 | .05125 | .065 |
| 61-63 390 | .05625 | .0625 |
| 64-66 375 | .05625 | .0625 |

**LOS ANGELES—**

| | | |
|---|---|---|
| U. S. Motor grades: | | |
| Above 69 octane | .0575 | .06 |
| 65-69 octane | .055 | .0575 |
| 60-65 octane | .0475 | .0525 |

### KEROSENE

**GULF COAST—**

| | | |
|---|---|---|
| 41-43 water white | .035 | .0375 |

**LOS ANGELES—**

| | | |
|---|---|---|
| 41-43 water white | .05 | .0525 |

### LUBRICANTS

(Pennsylvania Grade)

**NEW YORK (f.a.s. in bbl.)—**

| | | |
|---|---|---|
| Cylinder stocks: | | |
| 600 S.R. unfiltered | | .23 |
| 630 S.R. unfiltered | | .235 |
| 600 flash, S.R. | | .24 |
| 650 flash, S.R. | | .25 |
| Bright stock: | | |
| Light, 25 pour point | .34 | .35 |

### NEUTRAL OIL

| | | |
|---|---|---|
| 200-3 color | .43 | .50 |
| 150-3 color | .41 | .46 |

### PARAFFIN WAX

**NEW YORK (prices per bbl.)—**

| | | |
|---|---|---|
| 123-125 A.m.p. | .0560 | .0625 |
| 125-127 A.m.p. | .0560 | .0625 |
| 128-130 A.m.p. | .0585 | .0650 |
| 133-135 A.m.p. | .0615 | .0700 |
| 135-137 A.m.p. | .0640 | .0700 |
| Crude scale: | | |
| 124-126 w.s. | .05 | .0525 |
| 124-126 y.s. | .05 | .0525 |

# MARKET RECORD OF ACTIVE OIL STOCKS . . .

Compiled by Carl H. Pforzheimer & Co., 25 Broad Street, New York City, Member New York Stock Exchange and New York Curb Exchange

## New York Stock Exchange

| 1941 High | 1941 Low | Week ended Aug. 2 High | Low | Close | Stocks— | Total shares outstanding | Par value | Latest dividend | Payable or last paid | Dividends paid in 1940 | Com. sh. earn. 1940 | 1939 | 1940 High | 1940 Low | 1939 High | 1939 Low |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 63½ | 44 | 62 | 60½ | 60½ | Amerada Corp. | 788,675 | N.P. | 50cQ | 7-31-41 | $2.00 | $2.25 | $1.56 | 58½ | 38½ | 74½ | 50 |
| 24¼ | 19½ | 23¼ | 22½ | 22½ | Atlantic Refining | 2,663,999 | $25 | 25cQ | 6-16-41 | 1.00 | 2.11 | 1.66 | 27⅛ | 18¼ | 24⅝ | 18⅛ |
| 10½ | 7 | 9¾ | 9¼ | 9¼ | Barber Asphalt Co. | 390,223 | $10 | 25c | 5-21-40 | .50 | —.48 | 1.39 | 16⅝ | 8½ | 21 | 10¼ |
| 10½ | 7⅝ | 10⅜ | 9⅜ | 9⅞ | Barnsdall Oil Co. | 2,558,779 | $5 | 15c | 9-8-41 | .60 | .97 | .76 | 13⅜ | 7⅛ | 19½ | 11⅛ |
| 6½ | 5¼ | 6½ | 6⅛ | 6¼ | Consolidated Oil Corp. | 13,751,726 | N.P. | 12½cQ | 8-15-41 | .72½ | .28 | .55 | 8⅛ | 5½ | 9⅞ | 6½ |
| 26¾ | 17⅜ | 26 | 25¼ | 25⅞ | Continental Oil of Delaware | 4,682,572 | $5 | 25cQ | 9-29-41 | 1.00 | .92 | 1.35 | 25 | 16⅛ | 31½ | 19⅞ |
| 5 | 3½ | 4¾ | 4½ | 4½ | Houston Oil | 1,098,618 | $25 | .. | 10-17-30 | .... | .30 | .43 | 6⅞ | 3⅜ | 9⅜ | 4⅛ |
| 13⅜ | 9⅝ | 13⅜ | 13 | 13 | Lion Oil Refining | 435,815 | N.P. | 25cQ | 7-15-41 | 1.00 | 1.05 | 1.50 | 14⅜ | 9 | 18⅛ | 10 |
| 17⅞ | 13 | 17⅞ | 17¼ | 17½ | Mid-Continent Petroleum | 1,857,912 | $10 | 40c | 6-21-41 | .80 | 1.60 | 1.42 | 17⅜ | 11½ | 18 | 11⅛ |
| 14⅜ | 9⅜ | 14⅜ | 12⅝ | 14⅜ | Mission Corporation | 1,378,645 | $10 | 25c | 12-20-40 | .25 | 1.01 | .87 | 11¾ | 7⅛ | 14⅞ | 8¾ |
| 7⅞ | 4¼ | 7⅞ | 7¼ | 7⅝ | National Supply | 1,155,517 | $10 | .. | 12-22-37 | .... | —.49 | —.87 | 9¾ | 4⅝ | 15½ | 5⅝ |
| 10 | 6¾ | 9⅞ | 9½ | 9⅝ | Ohio Oil Co. | 6,563,377 | N.P. | 25c | 6-14-41 | .... | 1.02 | —.10 | 8¾ | 5⅜ | 10½ | 6 |
| 9⅝ | 5½ | 9¾ | 8½ | 9⅜ | Pacific Western Oil | 1,000,000 | N.P. | 40c | 12-19-39 | .... | —.21 | .81 | 8⅞ | 5½ | 11⅞ | 7 |
| 10½ | 7¼ | .. | .. | .. | Pan American Pet. Trans. | 4,702,945 | $5 | 25c | 12-21-40 | .25 | 1.20 | 1.10 | 10½ | 6⅜ | 8¾ | 5 |
| 46 | 35¾ | 46 | 45½ | 45½ | Phillips Petroleum | 4,449,052 | N.P. | 50cQ | 5-31-41 | 2.00 | 2.60 | 2.21 | 41¾ | 27½ | 46½ | 31¼ |
| 17 | 14¼ | 17 | 16½ | 16⅝ | Plymouth Oil Co. | 1,038,633 | $5 | 30c | 6-30-41 | ‡1.30 | 1.38 | 2.38 | 22¾ | 15 | 24 | 17⅛ |
| 10¾ | 7 | 10⅝ | 9¾ | 9¾ | Pure Oil Co. | 3,982,031 | N.P. | 25c | 12-20-40 | .25 | 1.21 | 1.11 | 11½ | 6¾ | 11¾ | 6⅛ |
| 10½ | 7¼ | 9½ | 9⅛ | 9¼ | Richfield Oil Corp. | 4,010,000 | N.P. | 50c | 12-21-40 | .50 | .95 | .65 | 9¼ | 5⅞ | 10¼ | 6⅝ |
| 17 | 12½ | 17 | 16¼ | 16¼ | Seaboard Oil of Delaware | 1,244,383 | N.P. | 25cQ | 6-15-41 | 1.00 | 1.05 | 1.40 | 20 | 11 | 24⅜ | 15½ |
| 15¾ | 10⅛ | 15¾ | 15¼ | 15⅝ | Shell Union Oil | 13,070,625 | N.P. | 40c | 7-21-41 | .75 | 1.05 | .77 | 13⅛ | 7⅝ | 17¼ | 9⅞ |
| 32⅞ | 18⅞ | 32⅞ | 31½ | 32⅜ | Skelly Oil | 995,349 | $15 | 50c | 7-30-41 | 1.25 | 3.28 | 1.99 | 23¼ | 12¼ | 29½ | 15½ |
| 10⅜ | 8¼ | 10⅜ | 9⅜ | 9⅞ | Socony-Vacuum | 31,206,071 | $15 | 25cSA | 3-15-41 | .50 | 1.17 | 1.10 | 12½ | 7⅛ | 15⅛ | 10¼ |
| 24⅝ | 17⅞ | 24⅛ | 23¼ | 23¾ | Standard Oil of California | 13,003,953 | N.P. | 25cQ | 6-16-41 | 1.00 | 1.73 | 1.38 | 26⅛ | 16¼ | 33⅝ | 24⅛ |
| 34⅛ | 25½ | 34⅛ | 33 | 33 | Standard Oil (Indiana) | 15,272,020 | $25 | 25c | 6-16-41 | 1.50 | 2.20 | 2.23 | 29 | 20¾ | 30 | 33¾ |
| 45⅝ | 33 | 45¼ | 43⅛ | 43⅛ | Standard Oil of New Jersey | 27,280,998 | $25 | 1.00† | 6-16-41 | 1.75 | 4.54 | 3.26 | 46½ | 29⅞ | 53½ | 38 |
| 48½ | 34¼ | 48½ | 47 | 48½ | Standard Oil of Ohio | 753,740 | $25 | 37½c | 6-14-41 | 2.00 | 7.44 | 6.64 | 41¾ | 26¼ | 32¾ | 17 |
| 60½ | 50 | 59½ | 59 | 59½ | Sun Oil | 2,434,863 | N.P. | 25cQ | 6-16-41 | *1.00 | 3.03 | 2.74 | 65⅞ | 46¾ | 66 | 45¾ |
| 2⅜ | 1⅜ | 2⅛ | 2 | 2⅛ | Superior Oil Corp. | 1,388,979 | $1 | 10c | 12-28-40 | .10 | .11 | .04 | 2½ | 1⅛ | 3⅝ | 1¾ |
| 44¾ | 34½ | 44¾ | 43⅛ | 43⅛ | Texas Corp. | 10,876,139 | $25 | 50cQ | 7-1-41 | 2.00 | 2.90 | 3.02 | 47⅝ | 33 | 50¾ | 32½ |
| 4⅛ | 2⅞ | 3¾ | 3⅝ | 3⅝ | Texas Gulf Producing Co. | 888,147 | N.P. | 10c | 6-14-41 | .20 | .63 | .69 | 4¼ | 2½ | 5⅝ | 3¼ |
| 7¾ | 5¼ | 7¾ | 7½ | 7½ | Texas Pacific Coal & Oil | 888,236 | $10 | 10c | 6-2-41 | .40 | .54 | 1.00 | 8⅝ | 5⅜ | 11⅜ | 7 |
| 11¼ | 9⅜ | 11¼ | 10⅝ | 11 | Tide Water Associated | 6,371,827 | $10 | 15c | 6-2-41 | .70 | 1.14 | 1.05 | 12 | 8¾ | 14¼ | 9½ |
| 15¼ | 12¾ | 15⅛ | 14⅞ | 15⅛ | Union Oil Co. of California | 4,666,270 | $25 | 25c | 5-10-41 | 1.00 | .99 | 1.25 | 17½ | 12 | 19⅜ | 15⅛ |
| 31 | 25⅝ | 31 | 30⅜ | 30¾ | Union Tank Car Co. | 1,177,381 | N.P. | 50c | 6-2-41 | 1.75 | 2.22 | 2.07 | 29⅞ | 22¾ | 24¼ | 20⅛ |
| 2⅜ | 1⅝ | 2⅛ | 2⅛ | 2⅛ | Wilcox Oil & Gas | 470,768 | $5 | 10c | 2-15-40 | .... | .35 | .77 | 3⅝ | 1¾ | 4¼ | 2⅜ |

*Also 5 per cent in stock. †Includes extras. ‡Also 2 per cent in stock. —Deficit.

## New York Curb Exchange

| 1941 High | 1941 Low | Week ended Aug. 2 High | Low | Close | Stocks— | Total shares outstanding | Par value | Latest dividend | Payable or last paid | Dividends paid in 1940 | Com. sh. earn. 1940 | 1939 | 1940 High | 1940 Low | 1939 High | 1939 Low |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ¾ | ¼ | ½ | ½ | ½ | American Maracaibo Co. | 1,778,415 | $1 | .... | ..... | .... | —$0.05 | —$0.04 | ⅛ | ¼ | 1¼ | ½ |
| 7⅞ | 5⅛ | 7½ | 7¼ | 7½ | American Republics Corp. | 1,308,049 | $10 | 10c | 7-10-41 | .... | .78 | .14 | 10¾ | 4½ | 11¾ | 5½ |
| 1¾ | 1 | 1⅝ | 1½ | 1⅝ | Bridgeport Machine Co. | 263,700 | N.P. | $1.25 | 12-30-37 | .... | —.88 | —.95 | 3¼ | 1⅜ | 7¼ | 2½ |
| 45 | 36½ | 45 | 44¼ | 45 | Buckeye Pipe Line Co. | 200,000 | $50 | $1 | 9-15-41 | $4.00 | 5.09 | 3.13 | 43 | 28 | 34¾ | 26½ |
| 110¼ | 87 | 98 | 98 | 98 | Chesebrough Mfg. Co. | 120,000 | $25 | $1.50Q† | 6-23-41 | 6.00 | 6.33 | 7.87 | 117 | 95 | 130 | 108⅝ |
| 6⅝ | 5 | 6⅝ | 5 | 5⅞ | Cities Service (new) | 3,703,978 | $10 | | 6-1-32 | | 1.72 | .68 | 6¾ | 4 | 9¼ | 4¼ |
| 1¾ | ⅝ | 1⅝ | 1½ | 1⅝ | Cosden Petroleum | 465,332 | $1 | | | | ..... | ..... | 2⅛ | ⅝ | 2¼ | ½ |
| 19¾ | 12½ | 19½ | 18¼ | 19 | Creole Petroleum | 6,974,356 | $5 | 50cSA† | 6-16-41 | 1.00 | .98 | 1.38 | 24¼ | 11⅝ | 28 | 16¾ |
| 9 | 3¾ | 9 | 8½ | 9 | Darby Petroleum | 351,390 | $5 | 25c | 7-15-41 | .... | 1.12 | .03 | 4⅜ | 2⅞ | 7⅛ | 3⅝ |
| 2¼ | 1 | 2¼ | 2 | 2 | Derby Oil & Refining | 263,162 | N.P. | | | | .12 | —.37 | 2 | ¾ | 2⅝ | 1½ |
| 28¾ | 21¼ | 22¼ | 22¼ | 22¼ | Eureka Pipe Line | 50,000 | $50 | 50c | 8-1-41 | 2.25 | —.49 | .63 | 31 | 20¼ | 23 | 15⅛ |
| 39 | 29 | 39 | 37½ | 37½ | Gulf Oil Corp. | 9,076,202 | $25 | 25cQ | 7-1-41 | 1.25 | 2.44 | 1.69 | 39⅞ | 25⅛ | 45⅛ | 29¼ |
| 64⅝ | 52¾ | 64⅝ | 63½ | 64½ | Humble Oil & Refining | 8,987,840 | N.P. | 37½c | 7-1-41 | 2.00 | 3.13 | 3.33 | 68 | 47⅛ | 71 | 42½ |
| 7 | 5¾ | 6⅝ | 6⅜ | 6⅝ | Imperial Oil of Canada | 26,965,078 | N.P. | 25c | 6-2-41 | .62½ | .65 | .71 | 12⅜ | 5⅜ | 17 | 11⅜ |
| 5 | 2¾ | 4½ | 4¼ | 4¼ | Indiana Pipe Line | 300,000 | $7.50 | 20c | 11-15-40 | *2.80 | .09 | .33 | 7⅝ | 3 | 7¼ | 5½ |
| 11 | 8⅞ | 9⅞ | 9⅝ | 9⅞ | International Petroleum | 14,324,088 | N.P. | 50c | 6-2-41 | 1.25 | .... | 1.19 | 10⅝ | 8¼ | 27½ | 17 |
| 2⅝ | 1¾ | .. | .. | .. | Kirby Petroleum Co. | 500,000 | $1 | 10c | 3-15-41 | .... | .16 | .06 | 2¾ | 1⅝ | 3¾ | 2⅛ |
| 10⅛ | 8½ | 9 | 8¾ | 8⅞ | Lone Star Gas | 5,518,347 | N.P. | 20c | 4-22-41 | .70 | 1.17 | .98 | 10¾ | 7⅝ | 10½ | 7⅛ |
| 5⅝ | 4⅛ | 5½ | 5¼ | 5¼ | Louisiana Land & Exp. | 2,966,762 | $1 | 10c | 6-16-41 | .35 | .29 | .22 | 6¼ | 3¾ | 7⅜ | 4 |
| 10 | 9½ | .. | .. | .. | Margay Oil Corp. | 149,943 | N.P. | 25cQ | 4-10-41 | 1.00 | 1.02 | 1.52 | 17 | 9¼ | 17 | 14½ |
| 4⅛ | 2½ | 4⅛ | 3⅞ | 4⅛ | Middle States Petroleum "A" | 291,970 | $1 | 37c | 1-31-41 | .63 | .31 | .37 | 4⅛ | 2¾ | 5¾ | 2¾ |
| 8 | 7 | 7¾ | 7⅝ | 7¾ | Midwest Oil Co. | 998,474 | $10 | 45c | 6-16-41 | .90 | .88 | .99 | 8½ | 5½ | 8¾ | 6⅝ |
| 6⅛ | 5⅛ | 5½ | 5⅜ | 5⅜ | Mountain Producers | 1,593,584 | $10 | 30cSA | 6-16-41 | .60 | .58 | .70 | 6¼ | 4⅞ | 6 | 4⅞ |
| 12⅜ | 10⅛ | 11⅜ | 11⅛ | 11¼ | National Fuel Gas | 3,810,183 | N.P. | 25cQ | 7-15-41 | 1.00 | 1.12 | .95 | 13⅛ | 10 | 14 | 11¼ |
| 12⅞ | 10¼ | 12⅝ | 12¼ | 12¼ | National Transit | 509,000 | $12.50 | 50c | 6-16-41 | 1.00 | 1.08 | .91 | 12½ | 8¾ | 9½ | 7¼ |
| 1⅜ | 1 | 1⅜ | 1¼ | 1⅜ | New Mexico and Arizona | 1,000,000 | $1 | 1c | 12-1-37 | .... | .03 | .02 | 1¼ | ¾ | 1⅜ | 1 |
| 8¼ | 6⅝ | .. | .. | .. | New York Transit | 100,000 | $5 | 30c | 4-15-41 | .60 | .91 | .88 | 7¾ | 5¼ | 6 | 4 |
| 9¾ | 7¾ | 9 | 8¾ | 8¾ | Northern Pipe Line | 120,000 | $10 | 50c | 6-2-41 | .80 | .70 | .31 | 9⅞ | 6 | 7 | 4½ |
| 4⅛ | 2⅝ | 4¼ | 3¾ | 4¼ | Pantepec Oil | 2,856,872 | $1 | | | | ..... | ..... | 5½ | 2½ | 7⅝ | 4 |
| 2⅞ | 1 | 2⅝ | 2½ | 2½ | Root Petroleum Co. | 336,045 | $1 | 25c | 2-1-37 | .... | .04 | .70 | 3¼ | 1 | 5 | 1¼ |
| 2⅝ | 2⅛ | 2½ | 2½ | 2½ | Ryan Consolidated | 298,931 | N.P. | 10c | 12-28-40 | .... | .43 | .16 | 3 | 1¼ | 3 | 1⅞ |
| 8 | 6½ | 7⅝ | 7 | 7 | Southern Pipe Line | 100,000 | $10 | 25c | 3-3-41 | .50 | .81 | .25 | 11¾ | 4¾ | 4⅞ | 3½ |
| 43 | 36⅛ | 42½ | 41¼ | 42½ | South Penn Oil | 1,000,000 | $25 | 37½c | 6-27-41 | 2.50 | 2.10 | 2.84 | 44 | 28 | 40½ | 26¾ |
| 30½ | 23 | 26 | 26 | 26 | Southwest Penna. Pipe Lines | 35,000 | $50 | 50c | 7-1-41 | 6.50 | 3.22 | 2.06 | 35 | 21 | 23 | 18 |
| 20⅜ | 17⅞ | 19⅜ | 18⅞ | 18⅞ | Standard Oil of Kentucky | 2,604,790 | $10 | 25c | 6-16-41 | 1.30 | 1.47 | 1.53 | 20⅞ | 16½ | 20⅛ | 17¼ |
| 2 | 1⅜ | 1 | 1⅞ | 2 | Sunray Oil | 1,975,876 | $1 | 5c | 12-20-40 | .10 | .23 | .25 | 2 | 1⅜ | 2⅝ | 1⅜ |
| 3¼ | 2⅝ | 3⅛ | 3 | 3 | Texon Oil & Land | 936,024 | $2 | 10c | 6-28-41 | .40 | .45 | .49 | 3⅛ | 2 | 4 | 2⅝ |
| 3⅞ | 2¼ | 3⅞ | 3⅝ | 3⅞ | Transwestern Oil Co. | 750,000 | $10 | ... | ..... | .... | —.59 | —1.42 | 3⅝ | 2 | 6 | 2½ |
| ⅛ | ½ | ¾ | ⅝ | ⅛ | United Gas Corp. | 7,818,959 | $1 | ..... | ..... | .... | —.49 | —.55 | 2⅛ | ¾ | 3⅜ | 1⅛ |

*Includes $2.50 capital distribution. †Includes extras. —Deficit.

# Reopen Hearings on Gas Entry Into Wisconsin

*(Continued from Page 14)*

sat as an observer in the federal proceedings, accepted the state commission's jurisdiction and became a third applicant.

Natural Gas Pipeline, now serving northern Illinois, was first to sound out the Wisconsin market, some 10 years ago, as disclosed in the testimony.

All three remaining companies announced transfer of their applications to Wisconsin subsidiaries, organized to facilitate operation under state laws and the commission's jurisdiction.

Western fathered the Wisconsin Natural Gas Co.; Independent the Wisconsin Gas Transmission Co., and Natural Gas Pipeline the Badger State Pipeline Co. The Wisconsin certificate, if issued, will go to one or another of the three "children."

Issues as between the rival applicants revolved around their comparative rate structures and their ability to assure economical, and efficient pipe lines to Wisconsin and to make quick delivery of gas.

### Pipe-Line Proposals

Independent and Western both propose pipe lines entering Wisconsin from Iowa, the former from the Texas Panhandle and the latter from the Kansas Hugoton field. Independent announced plans for a 22-in. pipe line approximately 820 miles long and Western a 26-in. pipe line 802 miles in length.

Natural Gas Pipeline now has a 24-in. line from Texas to the Chicago market and already has started construction of a new parallel 26-in. line, 865 miles long, from Moore County, Texas, to serve the northern Illinois and Wisconsin markets, Messrs. Loebell and Kesinger testified.

Their previous experience, they contended, gave them an advantage in planning and constructing a pipe line through territory which their competitors have not penetrated, and 11 interconnections between the 24-in. and 26-in. lines give the system double protection against hazards of interruption, they said.

Natural Gas Pipeline already has awarded contracts for 401 miles of the 26-in. pipe line, Mr. Kesinger said. The contracts total $4,531,035 and the total cost of the pipe line was estimated at $19,593,000 exclusive of the contemplated expenditures in Wisconsin.

The two pipe lines would diverge near Geneseo, Ill. The company has acquired a right-of-way into Wisconsin as far as Milwaukee, Mr. Kesinger said, and its entire Wisconsin-Illinois system is designed for a potential capacity of 260,000,000 cu. ft. of gas a day. For the present a capacity development of 155,000,00 cu. ft. daily is contemplated at a capital outlay of $40,815,000. The 24-in. line now is delivering 75 billion cubic feet a year, he said.

The company proposes to extend a 20-in. line to Milwaukee, Sheboygan, Manitowoc and Green Bay, entering Wisconsin near Genoa City, while a 10-in. line, entering the state near Beloit, would serve Rockford, Ill., Beloit, Janesville and Madison, Wis. It hopes to complete the 26-in. line late in January, or early in February 1942, he said, and if it obtains the Wisconsin certificate new contracts will be let for the Wisconsin line and deliveries can start early in 1942.

He expressed doubt, in view of present market conditions and priorities, that the competing companies can make delivery of gas with comparable promptness. Paul Kayser, Houston, Tex., president of Western Natural Gas, had forecast ability to deliver gas within 6 months after completion of its main pipe line and Independent presented a 9-months' estimate, through its president, Don Emery, and P. McDonald Biddison, consultant.

Neither, however, proposed to build a pipe line to Wisconsin unless a certificate is granted, and Mr. Kayser testified he will not build a line to Wisconsin unless he obtains a contract with the Milwaukee Gas Light Co., largest prospective purchaser.

Natural Gas Pipeline, however, indicated that regardless of whether it is granted an exclusive certificate to operate in Wisconsin it is in position to serve the southeastern Wisconsin industrial cities of Racine, Kenosha and Beloit. All three companies propose to serve the southern and southeastern portions of Wisconsin, the Michigan lake ports as far north as Green Bay, and the industrial cities of the Fox River Valley including Appleton, Oshkosh, Fond du Lac and Neenah-Menasha.

Estimates of J. Samuel Hartt, consultant of Western Natural Gas, on the cost of pipe-line construction were attacked by Mr. Loebell as "unsound." He knows, he said, that a system such as that described by Mr. Hartt, cannot be built for $26,800,000, as claimed. Mr. Hartt placed the actual cost of construction, exclusive of rights-of-way and other factors, at $4,143 a mile, while Natural Gas Pipeline contracts have been awarded in Iowa at $7,432 a mile, Mr. Loebell testified. The Hartt estimates, he said, omitted such provisions as telephone systems, gas plants and interest during construction and were based on an estimated cost of $55 a ton for pipe. He would be fortunate to get the pipe at $60 a ton, Mr. Loebell said, and pointed out that recent difficulties have arisen in obtaining delivery of pipe of 20-in. and larger diameter.

Both Western and Independent based original estimates on pipe with a wall of 9/32 in., but both, because of recent price increases and market conditions, have revised their plans to call for ¼-in. wall pipe similar to that now being laid by Natural Gas Pipeline.

Witnesses for all three companies gave assurance of sufficient natural gas supplies to guarantee service of Wisconsin for a period of years sufficient to justify transfer from manufactured gas.

### Opponents Pass Resolutions

The same interests who supported unsuccessful efforts in the 1941 legislature to impose an excise tax on natural gas which pipe-line firms fought as prohibitive, were represented in the hearing.

The commission accepted resolutions adopted by the state councils of the American Federation of Labor and the Congress of Industrial Organizations, opposing natural gas.

Graham E. Getty, Washington D. C., chief statistician for the Association of American Railroads, testified that the fifth-year sale of 50,972,602,000 cu. ft. annually anticipated by Western Natural Gas would displace 1,945,519 tons of coal in the state.

Key witness for the intervenors, however, was Harold Stevens, Cincinnati, Ohio, fuel technologist employed by Appalachian Coals, Inc., who occupied the stand for several days.

He presented an exhaustive series of statistical studies in support of his contentions.

In refutation of Mr. Stevens' arguments, natural-gas applicants pointed out that purchase of electrical heating and cooking devices have been stimulated by a temporary promotional rate which is not likely to continue indefinitely and pointed out in crossexamination of Mr. Stevens that coal, of which he is the avowed champion, is subject to service interruptions also in strikes, transportation failures and the threat that many miners may be drafted in national-defense service.

Mr. Stevens' crossexamination occasioned one of the most amusing incidents in the long hearing. He admitted cheerfully that he was a "biased" witness, and just as cheerfully admitted he burned natural gas in his home when he was a Cleveland resident some years ago. Asked why he burned gas in preference to coal, he replied: . "It is clean, convenient and readily controlled. All the good things they say about natural gas are true."

In answer to his prediction that natural gas would have difficulty in annexing the paper mill business, the applicants called as a witness J. Earl Bryan, Chicago, representing the Wisconsin Paper and Pulp Manufacturers Association, who said many of the 20 mills represented in the association would be interested in use of natural gas if it could be demonstrated that their operations cost would be reduced thereby.

Among the last witnesses in the hearing were officials of three Wisconsin utilities distributing manufactured gas in the area to be served.

### Utilities Head Testifies

Bruno Rahn, president of the Milwaukee Gas Light Co., and vice president of the Milwaukee Coke & Gas Co., from which the former buys a major portion of its gas supply, informed the state commission that unless natural gas is made available soon his firm may have to petition for a 7 to 10 per cent increase in rates.

Ever since natural gas came into Illinois, Mr. Rahn explained, his company has recognized that at some time it would be offered in Wisconsin and it has refrained accordingly from overexpansion of its gas-making capacity. The combined capacity of the coke plant and the company's own carbureted-water-gas plant is around 34,000,000 cu. ft. a day and the limit of that capacity is approaching closely, he said.

If natural gas is not admitted, he added, the manufacturing plants must be expanded at a cost of several million dollars which would involve new financing under adverse conditions. It is no secret that financial circles do not look with favor upon new gas-making enterprises, particularly in Wisconsin where the applications of three pipe-line companies are pending, Mr. Rahn said.

He could see a saving to his company of at least $550,000 a year under two of the rates and $750,000 a year under the other, he said, but an indirect attempt by Milwaukee City Counsel to induce him to express a preference was frustrated by a commission ruling.

He also forecast a probable reduction of 10 per cent in residential gas rates, 15 per cent on commercial rates and 20 per cent on house heating and firm gas industrial rates in the event natural gas is made available.

A. F. Davey, Sheboygan, vice president of the Wisconsin Public Service Corp., which serves several lakeshore and valley communities including Green Bay, Sheboygan, Oshkosh, Two Rivers, Kohler, Sheboygan Falls and Plymouth, definitely informed the commission that "we do desire natural gas," as it will reduce costs to residential and commercial customers and enable them greatly to expand their use of fuel.

The third utility executive, Carl Altenburn, Burlington, vice president and general manager of the Wisconsin Southern Gas Co., declared his firm "wants and needs natural gas as promptly as possible." The company serves seven small cities in southeastern Wisconsin, with a total of 3,700 customers in Burlington, Lake Geneva, Williams Bay, Elkhorn, Walworth, Delavan and Fontana.

In closing the hearing, the commission granted permission to competing applicants to recall E. V. Kesinger, Natural Gas Pipeline general superintendent, for crossexamination later if they desired, when commission counsel opened hitherto untouched issues in asking a breakdown of his estimates of construction costs for the proposed Wisconsin system.

# EQUIPMENT PROGRESS...

## Cardwell Announces New Improved Servicing Hoist

The Cardwell Manufacturing Co., Inc., Wichita, Kans., announces improvements in its Model WH servicing hoist, mounted on a Caterpillar D7 tractor.

Model WH is recommended for well servicing to 5,000 ft., and when equipped with clutched rotary-drive sprocket, for workover jobs to the same depth.

This improved hoist has the new "Cardwell" dual safety braking system. Two special safety features enable either brake to operate independently and hold the load if the other is damaged. The brake flanges are of special steel and are heat-treated to give three to four times the life of ordinary steel flanges.

The free-rolling drum is equipped with SKF self-aligning roller bearings. The drum is standard with an hydraulically operated, internal-expanding band-type friction clutch, roller and ball-bearing mounted. The drum and chains are shielded to provide greater safety for the crew.

Line speeds and pulls have been increased through the improved Caterpillar D7 tractor. This D7 tractor has five speeds forward and four reverse.

## TRADE LITERATURE

**JOHNS-MANVILLE, 22 East Fortieth Street, New York.—Form PK-12A A completely new illustrated catalog of packings and gaskets, containing service recommendations and suggestions. In addition to detailed information on J-M packing and gasket styles, the handbook includes handy recommendation tables which serve as a guide to proper packing selection for various types of equipment under such diversified service conditions as steam, brine, ammonia, acids, caustics, and oils. An analysis of the factors which determine packing performance and helpful hints on getting the most out of packing and gaskets are given.**

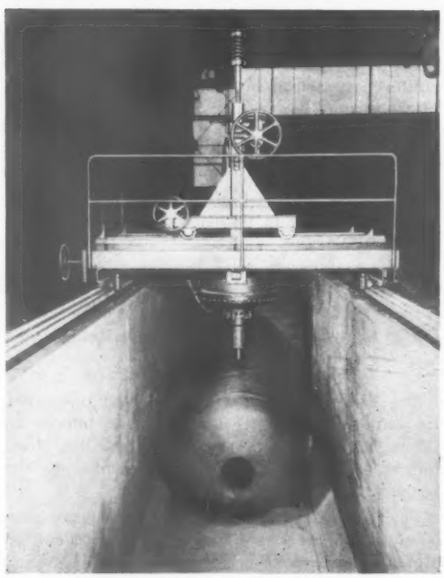
**MERCO NORDSTROM VALVE CO., 400 Lexington Avenue, Pittsburgh, Pa.—Bulletin V-136, giving performance records of Hypreseal valves in mud-line service, and featuring Nordstrom Merchrome coated valves. Actual unretouched photos are presented of valves removed for inspection after use in drilling for long periods of time. The Merchrome coating process and its application to mud-line service are described. Sizes are listed, 2, 3, and 4-in., with tables of specifications covering dimensions, pressure ratings, and new numbers to be given to these valves.**

**% PROPORTIONEERS, INC. %, Providence, R. I.—Bulletin describing its method of keeping heat exchangers clean and up to maximum efficiency by the chloramine process.**

**PAGE STEEL & WIRE DIVISION, American Chain & Cable Co., Inc., Monessen, Pa.—Catalog No. 641, covering its line of fences. By a simplification of sections so that the fence buyer can quickly select the Page fence for his particular need, Page helps the fence buyer over many technical hurdles. Each section is devoted to a particular type of fence and is complete with large pictures, description, and specifications. Technical construction details are illustrated by simple line drawings so that unimportant, confusing nonessentials are eliminated.**

## First 1,000,000-Volt X-Ray Machine for Weld Inspection

The first 1,000,000-volt X-ray machine to be used for inspection of welds in pressure vessels with thicknesses up to 8 in. has just been placed in service by General Electric X-Ray Corp. at the Barberton, Pa., plant of the Babcock & Wilcox Co. The technical advantages experienced with this equipment make the sensitivity of radiographs of heavy welds many times that formerly possible. This is the latest in a series of machines with steadily higher voltages, used by Babcock & Wilcox, beginning with a 200,000-volt machine used in 1929 for inspection of weld thicknesses up to 2 in., through a 300,000-volt machine in 1932, and a 400,000-volt machine in 1935. Increasingly higher pressures in power boilers and other equipment have caused pressure vessel thicknesses to increase accordingly, with corresponding problems of X-ray inspection. For instance, the previously highest voltage machine (400,000 volts) required 3½ hours per foot of weld inspected in 4½-in. plate, while the new machine reduces this time to 3 minutes.



*1,000,000-volt X-ray machine in position, X-raying a weld in a boiler drum*

The machine is shock-proof and self-contained. In operation, the vessel to be inspected is placed on motor-driven trunnions in a concrete-lined pit, 12 ft. deep, 10 ft. wide, and 64 in. long. The X-ray tube and transformer runs over it on a specially constructed carriage and the rays are directed downward. This provides a maximum of protection for the personnel and still allows the use of existing handling equipment. The tube and transformer are mounted together as a unit, the grounded anode end of the X-ray tube projecting downward. The special carriage is adjustable vertically, horizontally, and laterally, and the tube can also be swung at any angle. The controls are all installed in a separate concrete-walled room, the entrance to which is through a maze of 18-in. concrete providing 36 in. of concrete for protection to the operator. Three-phase, 220-volt, 60-cycle alternating current is supplied to a motor generator, which, in turn, supplies 180-cycle, single-phase current to the transformer that excites the X-ray tube.

## Luber-finer Announces New Dieselpak for Compounded Oils

In line with its policy of keeping continuously in pace with the oil industry, Luber-finer, Inc., announces the new Luber-finer Dieselpak, which has been designed expressly for use with compounded oils. In addition to accomplishing the functions of the average filter, it is designed to remove colloidal particles, soot, etc., from the oils without materially affecting the compounds or additives in compounded diesel engine oils.

*New Luber-finer Model 135-S*

The Luber-finer Dieselpak, which is approved by major oil companies and oil engineers, was developed under the personal direction of Dr. U. B. Bray, nationally recognized authority on all types of oil, whose most recent efforts have been devoted to development of compounded oils. Exhaustive field and laboratory tests indicate that the new Dieselpak is as efficient in its own field as is the standard Luber-finer refining pack, which is used on all types of installations the world over.

A comprehensive technical bulletin on this new development has been prepared and copies may be obtained by writing Luber-finer, Inc., Los Angeles, Calif.

## Pumps to Water New Pennsylvania Turnpike

Pennsylvania takes the spotlight for the completion of the greatest express superhighway turnpike in the history of American road making. Skimming along for 160 miles between Harrisburg and Pittsburgh, the Pennsylvania Turnpike is a four-lane divided speedway with wide-swing 90-mile-an-hour curves and almost imperceptible grades. The Standard Oil Co. of Pennsylvania has the exclusive franchise for the operation of service stations along the route. When the turnpike engineers specified and installed 13 Peerless Hi-Lift pumps for the air-conditioning systems at the tunnel portals, Standard followed their judgment and specified nine Hi-Lift pumps for the service stations.

The advantages of Peerless Hi-Lift pumps are that they have no bowls, impellers and no plungers. A polished, heavily chromium-plated hypocycloidal rotor revolves in a co-related cutless rubber stator in such a manner that the water is literally pushed out of the well. The stream is continuous and uniform, without turbulence or pulsation. This patented construction is one of the most outstanding improvements in the history of deep-well pumping equipment. Its remarkable simplicity accounts for the power economy, positive operation and freedom from slippage.

The initial experience of the Standard of Pennsylvania bears out these claims and led to a repeat order for 13 more Peerless Hi-Lift deep-well pumps soon to be installed, making a total of 35 Hi-Lifts for the turnpike. These pumps were manufactured by the Peerless Pump Co. of Los Angeles, Calif., and Canton, Ohio.

## Ryerson Addition Improves Service of Chicago Plant

Among the latest additions necessitated by heavy customer requirements at Joseph T. Ryerson's 21-acre steel service plant in Chicago is the new connecting bridge between two main office buildings. When completed, the 66-ft. glassed-in span will hasten the flow of work between departments and considerably speed customer service. Rebuilt and enlarged loading doors have been newly added to plant service facilities—aiding faster loading and dispatching, and assuring prompt pickup for will-call customers. Ryerson's network of 10 steel-service plants strategically located in important industrial areas provides prompt nationwide service to all steel users.

## Marmon-Herrington Production Keeping Pace With Expansion

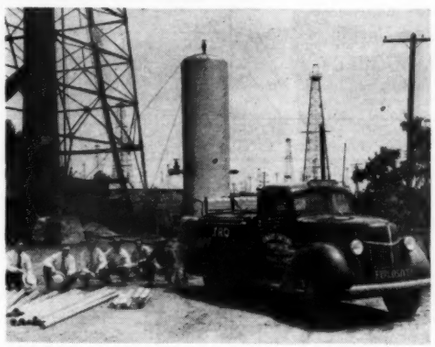
In one industrial plant, at least, there has been no waiting for completion of new construction to increase output. By reason of careful planning by Marmon-Herrington officials, machine tools were ordered well in advance and manpower and work were ready to utilize each new building as fast as it was roofed.

First came the extension of the original truck-assembly building to approximately twice its length, an entirely new floor on the administration building to house the greatly expanded engineering and drafting departments, and the doubling in size of the machine-shop building where parts for Marmon-Herrington all-wheel-drive trucks, track-laying tractors and tanks are machined and finished.

Following immediately was the erection of an entirely new assembly-line building for tractors and tanks, the same size as the enlarged original building; another building almost as large, for crating and shipping Marmon-Herrington units, with spur railroad tracks and inside loading platforms. Production flowed smoothly into all of these new buildings as fast as they were completed.

At the present time four additional separate building projects are rapidly nearing completion. Steel is going up to bridge over the space between the two large assembly-line buildings. A slightly smaller building to be used as an engineering and experimental development department is practically finished. The size of the shipping building has been doubled, and an additional story on the separate personnel and recreational building for employes is practically ready for occupancy.

## Well Shooting Service



Howard Green Torpedo Co., 5501 North Eastern, Oklahoma City, Okla., offers to the Oklahoma territory a complete oil-well shooting service. Special equipment is available for trouble shooting, and in the shooting of drill pipe. The photograph illustrates one of the three modern shooting trucks now in service by the company.

# AMONG EQUIPMENT MEN...

## Davis Made Manager of Foote Commercial Gear Plant

W. A. Barr, president and general manager of Foote Bros. Gear & Machine Corp., has announced the appointment of Russell G. Davis as manager of the commercial gear plant at 5301 South Western Boulevard, Chicago. Mr. Davis has been associated with the mechanical power transmission industry since his graduation in 1921 from the University of Wisconsin with a B.S. degree in mechanical engineering.

He enters the Foote Bros. organization with a background of 20 years service with the Chain Belt Co., of Milwaukee, Wis., where he progressed through the positions of student apprentice, general foreman chain division, district manager of the southwestern division with offices at Houston, Tex., district manager of Chicago territory and assistant to the sales manager of the chain division.

## Advancements Announced by G-E Industrial Control Division

Two appointments have been made in General Electric's industrial department at Schenectady, N. Y. G. R. Prout, manager of sales in the department's industrial control section since 1939, has been appointed manager of sales of the industrial control division. R. S. Glenn has been appointed manager of sales of the industrial control division, assisting Mr. Prout. These announcements were made by J. E. N. Hume, commercial vice president of General Electric and manager of the company's industrial department.

W. C. Yates has been relieved of his present duties as manager of the control and renewal parts division of the G-E industrial department in order to devote more time to his duties as assistant manager of the department, Mr. Hume stated. W. T. Darcy will continue as manager of sales, renewal parts section, reporting to the management of the department.

## Biersmith Made Production Manager by Columbian Tank

Edward L. Biersmith, Jr., has been promoted to production manager of the Columbian Steel Tank Co., Kansas City, Mo.

Mr. Biersmith, formerly assistant sales manager of the company, has been in Washington, D. C., the past year representing the firm's interests in fulfilling many national-defense contracts. His activities in the nation's capital produced such a volume of government business that Columbian's production has established an all-time high for the company in this, its forty-eighth year.

*E. L. BIERSMITH, JR.*

Ironically enough, Mr. Biersmith's job now changes from that of obtaining government contracts to that of producing them. He is particularly well fitted for the job of production management having been associated with the Ford Motor Co. in former years. At one time, Mr. Biersmith was night superintendent of their Kansas City branch.

Mr. Biersmith has been connected with the Columbian Steel Tank Co. for the past 12 years.

## Equipment Exchange Division Formed by Frick-Reid

J. L. Shakely, president of Frick-Reid Supply Corp., Tulsa, announces the organization of an "Equipment Exchange Division which will offer a new service to the oil industry.

*J. S. DEWAR*

The new division will be headed by J. S. (Stewart) Dewar, as general manager. Mr. Dewar is well known to the oil industry, having been associated with several major oil companies in field and executive capacity for 20 years, and for the past several years has been operating as an independent producer.

The function of the division will be to exchange or purchase surplus equipment of producing, pipe line and refining companies, making such equipment available to others who have need for it.

## Schneider Made Vice President of Falk Corp.

The Falk Corp., Milwaukee, Wis., manufacturers of speed reducers, flexible couplings and other transmission machinery, announces the appointment of W. L. Schneider to the position of vice president of sales, T. F. Scannell to sales manager and J. B. Kelley to assistant sales manager.

Mr. Schneider was a graduate from Marquette University in 1925 and started at Falk as a sales estimator. He has held successive positions as a sales engineer, assistant sales manager and sales manager. While fulfilling his new duties as a vice president of the Falk Corp., he will continue in the supervisory capacity as director of sales.

Mr. Scannell, who succeeds Mr. Schneider as sales manager, will be responsible for the active sales of all Falk products, except those under the jurisdiction of the foundry division. Mr. Scannell spent some time with the Chain Belt Co. and joined Falk in 1928 as St. Louis representative, later becoming district manager of the southwest territory. Since April 1940 he has been assistant to the sales manager in Milwaukee.

Mr. Kelley has been with the Falk Corp. since 1927, first as an apprentice and later as an estimator, salesman, and district manager in Cincinnati, Ohio. In recent years he had been in charge of Falk's flexible coupling business.

## Haering Company Opens New Headquarters in Houston

D. W. Haering & Co., Inc., 2308 S. Winchester Avenue, Chicago, has announced the opening of a new sales office in Houston, Tex. E. H. Snyder, water technologist and district manager of the Houston area is in charge of the new office at 726 Electric Building.

The company has increased its representation in the Southwest with the addition of S. R. Long and Gary I. Thomas, sales engineers. Mr. Long will make his headquarters at Waco, Tex., and Mr. Thomas is located in Dallas, Tex.

It has also announced the addition of John Daggett, chemist, to the present staff of chemists and engineers engaged in research work at its Chicago laboratory.

## W. E. Blair Made Head of New Solvay Development Section

The Solvay Process Co., manufacturer of alkalies and nitrogen products, has recently established a separate product development section with W. E. Blair as manager and D. H. Ross as assistant manager. Headquarters of the new section will be at 40 Rector Street, New York. Messrs. Blair and Ross, formerly associated with the executive office of Solvay Sales Corp., will apply their broad knowledge of the chemical industry principally to a study of the commercial usefulness of new Solvay products. Their work will involve close cooperation with the research and technical sales groups, with view to broadening the scope of Solvay's service to its customers.

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**20 Years Experience**
**Inquiries Invited**

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## Leases and Drilling Blocks

LEASES—East Texas, La., South Ark. 20 acres up, dollar acre up.—Owners—Address Attorney, Box 1122, Little Rock, Ark.

FOUR THOUSAND ACRE (4000) BLOCK
Rapides Parish, Louisiana
Open for Quick Deal
Box A-584, The Oil and Gas Journal
Tulsa, Okla.

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For mineral lease or leases, approximately 35,000 acres, divided into blocks of less than 5,000 acres each, extending South from Sec. 14, Township 21 South, Range 22 East, to the Gulf of Mexico, and East of Cammada Bay, situated in the Parish of Lafourche or Jefferson, State of Louisiana.

Specifications including detailed descriptions of lands may be obtained from the undersigned.

Sealed bids will be received at the office of the Mayor of New Orleans, Louisiana, on or before the 12th day of August, 1941.

**EDWARD WISNER DONATION ADVISORY COMMITTEE**
**FRED W. MATTHEWS, Secretary-Treasurer**
**c/o CHARITY HOSPITAL, New Orleans, La.**

EAST TEXAS Woodbine—Trinity sand wildcats starting on Major Company blocks offer quick play 10 to 50 for one bets. E. CROFT, PROCTOR, TEXAS.

FOR SALE: Oil and gas leases and small production located in Kentucky shallow field, also tracts of proven Fluorspar and zinc deposits. Reports on request. W. P. HARLEY, Bowling Green, Kentucky.

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| E | | and | | E | |
| N | X | Landowner's Royalties | | N | X |
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| W | C | Harry S. Wright | | W | C |
| | O | Farmington, N. M. | | | O |

DRILLING block 2500 acres, Farm out proposition, North of McLouth field, N.E. Jefferson County, Kans. on high structural uplift. Harry Haynes, Grantville, Kansas.

U. S. OIL RESERVE lands can be filed for lease on limited acreage by American Citizens. Want several join me in filing block in developing Rocky Mountain Area. Big opportunity. Small expense. Box A-346, The Oil and Gas Journal, Tulsa, Okla.

CASH paid for producing gas or oil wells anywhere. Old wells considered. G. Gibbs, 7700 Geary, San Francisco, Calif.

WILL SELL five acres undivided mineral rights perpetual under SE 29-8N-2E, Pottawatomie Co., Okla. $20.00 per acre, leased $1.00 per acre rentals. Certificate of title furnished. Write Box 483, Shawnee, Okla.

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200 ACRES
ZINC, LEAD, SILICATE LAND
Opportunity for operators that can finance a mining deal. General description furnished on request.
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FOR SALE: 160 acres surrounded by production. Major Co. operating lease joining. 750 ft. to sand. Will drill and equip well, assign lease for $2,500.00. Also excellent leases for Repressuring. H. B. Snyder, Box 126, Ottawa, Kans.

FOR SALE: 114-acre lease with 20 producing wells, complete with pumping equipment and tanks, located in Caddo Parish, Louisiana. Wilson Oil Corp., Jasper, Indiana.

NEW MEXICO
Oil and Gas Leases and Royalties.
**ROY G. BARTON, Hobbs, N. M.**

FOR SALE
All properties and assets of Kessler Oil and Gas Company consisting of producing leases and lease interests and equipment and producing and non-producing royalties in Oklahoma, Kansas and Texas. For information write the company at 604 Petroleum Building, Oklahoma City, Oklahoma. (No employment of brokers authorized.)

HERE is a chance to make some easy money. New 40-acre lease, in hot play of Shelby County. Other bargains. Write for information. C. A. Parker, Box 451, Center, Texas.

IF YOU are int. in big prod. and have equip. you may drill my 4240 ft. well in cent. Loving Co. Texas pool deeper. Geologist says present 40 gr. oil comes from deeper strata, which recent test showed to be at 4800, 5400, 6200 ft. This is now being done in Ward Co. where 8000 bl. are drilled on same general struc. Will give 600 acres. Investigate. H. Freels, 251 S. Hill, Los Angeles, Cal.

## Oil Industry Printing

OIL FIELD LEGAL BLANKS
Leases, assignments, releases, township plat books, well records, etc. Request on your letterhead gets free catalog. Olds Press, 215 East Third St., Tulsa, Okla.

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FOR SALE—Big Independent owning Chain of Super Service Stations in Colorado; doing good business, net profits to owners last three years $65,000. Annually Good Interest on Million Dollars, sell for less. Good opportunity for Expansion—in Business 12 years. Reason for selling, Father Retiring, Sons can carry on; might sell 51%. For particulars address P. O. Box 13, Pueblo, Colorado.

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The Philtower
Tulsa, Oklahoma

MAPS, information, valuations, well reports, etc., on royalties and producing properties, Texas and New Mexico. ROYALTY OWNERS SERVICE, P. O. Box 1535, Fort Worth, Texas.

WE BUY & SELL all types of Oil and Gas Royalties. Sales restricted to registered dealers only. Grimes Royalty Co., Tulsa Loan Bldg., Tulsa, Okla.

MONTHLY asphalt royalty income and a rock asphalt deposit for sale. Write owner, Lewis Smyth, Uvalde, Texas.

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## Sales Agencies Wanted

SALES representation for Eastern section on equipment used petroleum refining by engineer located New York. Long established relations prominent refiners. Products of recognized standing requiring engineering application considered only. Box A-580, The Oil and Gas Journal, Tulsa, Okla.

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LOUISIANA FARM
For Sale. Six adjacent counties producing oil. Prospecting now active. 1026 acres of land, fertile fields and timber (Hard woods). Bisected by paved state highway, one mile from railroad station, 150 miles from New Orleans. Reason for wanting to sell is illness. For complete information address A. V. Boutte, Jr., 2536 South Galvez St., New Orleans, La.

## For Sale—Maps

MY PERSONAL MAP, just completed, of area of new "Wilcox sand trend," Caddo, Grady, Stephens and Comanche Counties, southwest Oklahoma, now available. Shows wells, dry holes, known locations, depths of deepest wells, and corrected culture. Prices: Paper $7.50, Linen $10.00, from Map Department, Frederick G. Clapp, Consulting Geologist, 124 Chickasha Ave., Chickasha, Okla.

## Mailing Lists

ROYALTY owners, Oil investors, Unit holders, Stockholders, Operating personnel of oil industry. Oil Industry Mailing List Co., Tulsa Loan Bldg., Tulsa, Okla.

## Geologic Survey

GEOLOGICAL Survey bulletins listed by states. Send for lists. For sale by J. C. Howgate Bookseller, 120 So. Church, Schenectady, N. Y.

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BURKHART'S legal blanks and general forms serving Mid-Cont. oil field since 1908—Okla. Kans. N. Mex. Tex. Ala. Ark. Fla. Ga. Ill. Ind. Ky. La. Mich. Miss. Mo. Neb. N. Dak. Tenn. Wyo. Free catalog samples on request. Burkhart Ptg. & Sta. Co., 115 S. Cinn., Tulsa, Oklahoma.

## For Sale—Equipment

FOR SALE: 6—40 Gallon Foam Outdoor Type Mounted Fire Extinguishers. I.T.I.O. Co., Bartlesville, Okla.

FOR SALE: Complete Pennsylvania Refinery. Two thousand barrel tube still and tower, wax plant, filter house, tankage of all sizes. Available immediately. Complete or in part. Address Box A-590, The Oil and Gas Journal, Tulsa, Okla.

FOR SALE: Gas Meters. Orifice and Positive. George R. Milner, Box 457, Okmulgee, Oklahoma.

FOR SALE at Seminole Warehouse: 20 H.P. Bessemer Gas Engines as is—$75.00 each. I.T.I.O., Bartlesville, Okla.

FOR SALE: Heavy standard string of tools 18" down, located at Sapulpa, Okla. E. E. Abel, 1310 McCloud, Sapulpa, Okla.

45 STAR Spudder, self propelled, 90 HP Hercules, like new, with attachments. $3,000. J. S. Wise, Okmulgee, Okla.

FOR SALE at Seminole—One Allis-Chalmers Model "U-E" Tractor Pulling Unit. I.T.I.O., Bartlesville, Okla.

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**CORE DRILLING UNIT**

Formerly owned and operated by Seismograph Service, Tulsa. 31' mast, 75 r.p.m., 900# w.p., 4½ x 4-3½ x 3 Gardner-Denver pump, mounted on 1940 Model AC 403 G.M.C. truck, 2-speed Eaton rear axle. 500 ft. 2⅝" drill rod with 3" figd. couplings. 15 drill bits. Now located Falls City, Nebraska.

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FOR SALE—One Askania Vertical Field Magnetometer having zero temperature coefficient, also Calibrating equipment. Box A-591, The Oil and Gas Journal, Tulsa, Okla.

FOR SALE at Oklahoma City: A quantity of repaired and unrepaired duplex piston steam pumps, 6 x 4 x 6 and 10 x 3½ or 4½ x 10. I.T.I.O. Co., Bartlesville, Okla.

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FOR SALE at Oklahoma City: 7′ x 30′ 10 Tray Tulsa Boiler Absorber with Taylor Nozzles, purchased new in 1929, $1,000.00. I.T.I.O., Bartlesville, Okla.

FOR SALE: 2,500 barrel Skimming Plant complete except pipe and tanks. Write Western Tank & Road Supply Co. at Wichita, Kansas, Box 1571; or Fairfied, Ill., Box 49. Fairfield Telephone No. 427.

OIL HEATER—For Sale
Designed for a heat absorption of 3,000,000 B.T.U. per hour, complete with setting and circulating pump. Trinity Cotton Oil Co., Dallas, Texas.

FOR SALE: At Oklahoma City Warehouse: Cardwell ST-60 Oilwell Servicing Winch Complete with power take off transmission for Model 60 Caterpillar Tractor. I.T.I.O., Bartlesville, Okla.

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Fireproof building 55′ x 140′—Quick change gearhead and turret lathes—Radial drill presses—Shaper—Motor driven Landis pipe machine 2½″x13⅝″. Priced to sell.
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FOR SALE OR RENT: Gas engine powered Rotary Drilling Rig complete. Suitable for 4,500′ drilling. Box 1360, Phone 312, Seminole, Okla.

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From 100# to 2,000# discharge pressures in capacities from 100 cu. ft. to 3000 cu. ft. per minute either belted or direct connected gas, electric or Diesel types.
**ELECTRIC MOTORS**
25 Cycle and 60 Cycle
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From 50 to 500 HP
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FOR SALE by owner: Complete all steel Standard Cable tool rig. Bits 6 to 15 in. Excellent string fishing tools, 5500 ft. practically new drilling and sand lines. Located in Nassau County, Florida. List furnished on application. J. Eugene Brown, Aragon Hotel, Jacksonville, Fla.

CABLE TOOLS for sale. Complete drilling sets 24″ down to 5″ bits, stems, jars, sockets. Box 614, Pueblo, Colorado.

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| 15 HP Fairbanks-Morse Oil Engine | $250 |
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| 40 HP Tips Oil Engine, Used | $800 |
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FOR SALE: 2 Wilson pulling units with 125 HP. Waukesha motors. Excellent condition. Lucey Products Corp., Tulsa, Okla.

**FOR SALE**
8—24-yd. (or 74,600#) all steel DUMP CARS; one side discharge.
*Ideal for coke handling. Bargain!*
OTHER DUMP CARS (air operated) TOO.
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Caterpillars, crawler type, size "35" $375; size "65" with nigger head winch $795.00; Austin Western hydraulic grader 10′ blade $650. O. C. Evans, Mt. Sterling, Kentucky.

FOR SALE at Oklahoma City: 150—8″ Dresser-Dayton Long Sleeve Couplings less rubbers. I.T.I.O., Bartlesville, Okla.

FOR SALE—2 strings Rotary Tools offered at Bargain Prices. Capable of drilling to 3500 feet. Located on Gulf Coast. Inventory on request. Address inquiries to Box 670, Fort Worth, Texas.

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One gasoline drilling rig with two 85 H.P. Waukesha motors and unitized draw works complete.
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FOR SALE at Bartlesville: 1—2A National used Drilling Machine. I.T.I.O., Bartlesville, Okla.

FOR SALE at Seminole Warehouse: 6—10 x 4½ x 10 CP Simplate Type Valve Air Compressors, Belt Driven. $500.00 each. I.T.I.O., Bartlesville, Okla.

55,000 Barrel steel storage tank with steel top. Immediate delivery; good condition; location Oklahoma; very reasonable price. Address P. O. Box 767, El Dorado, Arkansas.

1—PARKERSBURG SC-11 Pumping Unit, Stroke range from 60″ to 132″ with motor, V-rope drive, in strictly first class condition. 30—CATERPILLARS with Caldwell Winch and Traveling boom. GREENSPON'S, Nat'l. Stock Yds., St. Clair County, Illinois.

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**STEEL TANK FOR SALE**
42 feet long, 9 feet diameter; 20,000 gallon capacity, perfect condition. One-half inch plate.
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Phone WHITEHALL 4-1048

FOR SALE: Type H-15000 Wheland-Lucey Slush Pump $350.00. Located East Texas. Lucey Products Corp., Tulsa, Okla.

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WANTED 100,000 ft. of good used 4, 6, 8, 10 and 12 inch pipe, plain or coupled. Write or wire Daniel A. Moritz Co., McKeesport, Pa.

WANTED TO BUY! Pipe threading machine, 1¼″ to 4″—4″ to 12″. Must be reasonable. Galoob Iron & Metal Co., Healdton, Okla.

WANTED: Spudder with or without tools capable of drilling two thousand feet. Write Box 463, Sunburst, Montana.

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**TANK CARS**
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**Good prices realizable NOW!**
**Freight Cars, too.**
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SITUATION Wanted by Internationally known Safety Engineer, Organizer, Author, Specialist Human Relations. Age 31. 3927 E. Admiral Pl., Box 2, Tulsa, Okla.

ENGINEER—5 yrs.' production experience desires change—progressive independent preferred. Box A-592, The Oil and Gas Journal, Tulsa, Okla.

PETROLEUM ENGINEER and Geologist, 11 years experience as genral superintendent for independent operator, desires connection with reliable company. Box A-600, Oil and Gas Journal, Tulsa, Okla.

EXPERIENCED PUMPER and vacuum man wants employment. 15 years in oil field. Can furnish references. Will go anywhere. Write Box 126, Burkburnett, Texas.

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WANTED—Representative in each oil field. Part time. New Jersey Chemical Co., P. O. Box 2603, Tulsa, Okla.

REFINERY EQUIPMENT INSPECTOR, qualified to carry on actual refinery equipment inspection, interpret results and combat corrosion problems. Inspection would be primary duty but would be expected to do general engineering work during slack period. Inspection experience necessary. Write, stating qualifications and salary expected, P.O. Box A-550, The Oil and Gas Journal, Tulsa, Okla.

AMERICAN BOOKKEEPER wanted for Independent part time book work and small warehouse; must be familiar with production equipment. Man with some practical production experience preferred. Opportunity to become manager. Living quarters on property. Give complete experience record and salary expected. P. O. Box 99, Great Falls, Montana.

"DRILLING MUD"
Distributors and dealers wanted for light and heavy mud, low price per ton, big profit, small investment, get territory now. Box A-601, Oil and Gas Journal, Tulsa, Oklahoma.

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